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STATE OF MICHIGAN

ECONOMIC REPORT of the Governor

1984

JAMES J. BLANCHARD, Governor

Transmitted to the Michigan Legislature
August 1984

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STATE OF MICHIGAN

OFFICE OF THE GOVERNOR

LANSING

JAMES J. BLANCHARD
GOVERNOR

August 1984

To the Members of the Michigan Legislature and
The People of the State of Michigan:

This document, the Economic Report of the Governor--1984, has been prepared to help you assess Michigan's current economic situation and the progress we are making toward full recovery.

It shows that significant results have already been achieved from our long-term recovery program. In virtually every sector of Michigan's economy, there is evidence of real improvement, as well as potential for continued growth.

Most importantly, the economic situation of people in our state is better than it has been in several years. The number of people working, and the personal income they are earning, have increased markedly and are on an upward trend for the future.

Our success in saving Michigan from financial disaster in 1983, and in putting it on a course toward full recovery, would not have been possible without the cooperation of the Legislature, which acted decisively at the point of crisis last year, and which continued to exercise fiscal discipline this year. The clearest evidence of this ongoing commitment to financial responsibility is the recent passage of our recommendation for a zero-increase state budget for next year, which then made possible an accelerated state income tax reduction.

These accomplishments, and the significant economic progress shown in this Economic Report are, by no means, indications that less emphasis should be placed on fiscal responsibility and restraint. The wounds inflicted on our state and our people by the recent deep and prolonged recession have not been completely healed. Hundreds of thousands of Michigan's residents are still without an opportunity to earn their own way. Thousands of businesses are still paying off debts accumulated during the past economic downturn, and are just starting on investment and expansion plans which were set aside until the state's economy improved.

Thus the economic progress which is now in evidence should strengthen our efforts to fully implement our long-term economic recovery program. The tasks which lie ahead are difficult, but we can approach them with confidence that they are part of an economic strategy which is yielding positive results.

In previous years, Economic Reports contained statistics tracing Michigan's precipitous decline, but could not possibly reflect what happened to the citizens of our state, whose lives were disrupted, hopes diminished, and dreams deferred. This year, the statistics in the Economic Report exhibit clearly the improvement in Michigan's economy, but they cannot show the most fundamental reason for these achievements. No economic analysis--in this report or any other--can convey the human strength and sacrifice which made it possible for Michigan to begin its economic recovery.

Therefore this Economic Report, and every document our state issues on its progress toward economic recovery, are not merely for the citizens of Michigan. These reports are really about our people and their efforts, individually and together, to work toward a strong and secure economic future.

Sincerely,

James J. Blanchard

James J. Blanchard
Governor

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF MANAGEMENT AND BUDGET

P.O. BOX 30026, LANSING, MICHIGAN 48909
ROBERT H. NAFTALY, Director

August 1984

The Honorable James J. Blanchard
Governor of Michigan
The Capitol
Lansing, Michigan 48909

Dear Governor Blanchard:

The 1984 Economic Report we submit to you today reviews significant developments in the Michigan and the U.S. economies during 1983 and presents forecasts for our state's economy in 1984. Also included are summaries of major economic events during the year and historical data on Michigan's employment, population, and economic activity by major sector.

This Economic Report focuses on 1983 and 1984, the period immediately following the most severe economic decline our state has experienced in over fifty years. At the end of 1982, Michigan was in crisis--its total budget deficit was $1.7 billion, and one out of seven people in its labor force were without jobs. In the pages which follow, there is clear evidence not only that the decline has ceased, but also that the positive trend is repairing the damage suffered in prior years.

But all the positive changes discussed here, should be recognized as relative improvements from extraordinarily depressed conditions. Michigan's level of economic activity is still well below the peak reached in the late 1970s. Continued emphasis on your long-term recovery program will be required to make our state's still tenuous economic situation secure--and further effort on your economic development and job creation initatives will be needed to give the half-million Michigan citizens who are still unemployed the opportunity to return to work.

It is apparent from this Economic Report that your long-range economic recovery program is indeed working. By the latter half of 1983, there was already measurable progress, which is being furthered by a full year of strong economic growth in 1984. Real Michigan personal income, after showing a modest improvement of 2.3 percent in 1983, is projected to increase by 5.2 percent this year. Employment, which rose by only 0.6 percent last year, is estimated to grow by 6.2 percent this

year. Motor vehicle production, one of our state's important indicators of private sector economic activity, is now rebounding from its decline, with a 20 percent increase in 1983 and an estimated 13 percent rise in 1984.

One point of caution is warranted. Even with Michigan's sustained commitment to a long-term recovery strategy, national economic developments could stifle our state's progress. The gross national debt has grown by 57 percent in just four years, and now exceeds $1.45 trillion. Federal government borrowing could remain at near record levels, since there has been little effective action to reduce the enormous projected deficits. This unrestrained deficit financing by the federal government could force up interest rates in 1985, limiting consumer purchases of new automobiles and homes and constraining business investment in additional plant capacity and more efficient equipment. Though increased interest rates would impede economic growth throughout the nation, Michigan is particularly vulnerable, because of its susceptibility to cyclical downturns.

Thus the conclusions which can be drawn from this report are that Michigan's economic condition has improved significantly, damage done during the recent deep recession is being repaired, and our state can make further progress toward economic recovery, barring adverse developments at the national level.

This Economic Report is produced by the Office of Revenue and Tax Analysis of the Department of Management and Budget. Updated data and articles discussing significant current economic developments are published in the office's bi-monthly newsletter, Michigan Economic Review and Outlook.

Valuable contributions to the report were made by the Michigan Departments of Agriculture, Commerce, Natural Resources, Transportation, and Treasury and by the Office of the Budget, Department of Management and Budget.

Sincerely,

Robert H. Naftaly
Director

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1984

ECONOMIC REPORT

SUMMARY OF 1983 ECONOMIC EVENTS

FIRST QUARTER

PIK Farm Program. The federal "Payment-in-Kind" (PIK) program was announced with the number of participants exceeding expectations. Farmers will receive surplus grains in exchange for reducing crop acreage.

Japanese Auto Imports. Japan agreed to restrict auto exports to the U.S. to 1.68 million units from April 1983 to March 1984, the third year of voluntary restraints.

General Motors and Toyota. G.M. and Toyota announced plans to jointly produce a subcompact car in the U.S. Production will take place at the idle G.M. plant in Fremont, California.

J. L. Hudson. J. L. Hudson closes its downtown Detroit store.

Oil Prices. OPEC lowers the price of oil from $34 to $29 per barrel, the first oil price reduction in 23 years.

Dow Jones Industrials. Rising stock prices pushed the Dow Jones Industrial Average above 1,100 for the first time on February 24th.

Economic Growth. U.S. real GNP grew at an annual rate of 2.6 percent during the first quarter, after declining in four out of the previous five quarters.

Producer Prices Drop. The Producer Price Index fell one percent in January, the sharpest decline since the index began in 1947. Consumer prices, as measured by the CPI for all urban consumers, increased only 1.2 percent in the first quarter.

Housing Starts Soared. Housing starts rose 35.9 percent in January to 1.7 million units, its steepest climb since housing starts were first counted in 1959.

SECOND QUARTER

Mortgage Rate Falls. The FHA/VA mortgage rate ceiling dropped to 11.5 percent from 12 percent, its lowest level since August 1980.

Dow Jones Industrials. The Dow Jones Industrial Average closed above 1,200 for the first time in history on April 26th.

Michigan's Jobless Rate. The unemployment rate in Michigan fell to 15 percent from a peak of 16.8 percent in the fourth quarter of 1982, while the U.S. rate dropped to 10 percent--the lowest rate since August 1982.

Real GNP. U.S. economic growth, as measured by the change in real GNP, increased at an annual rate of 9.7 percent in the second quarter. This growth was spurred by a significant increase in consumer spending.

Michigan's Income Tax. To eliminate a projected $1.7 billion budget and cash deficit, Michigan temporarily raised its income tax rate to 6.35 percent from 4.6 percent and cut expenditures by $225 million as part of the state fiscal recovery program.

Auto Sales Strong. U.S. auto sales in June increased 39 percent over year-ago sales for the best June total since 1979.

Michigan Youth Corps. Michigan put into place a job program to provide summer employment opportunities for over 25,000 young people.

THIRD QUARTER

National Unemployment Rate Drops. The U.S. jobless rate fell to 9.5 percent in July from 10 percent in June, the steepest monthly decline in more than 23 years. The Michigan unemployment rate was 12.9 percent.

Income Tax Reduction. Federal personal income tax rates were cut 10 percent as the final step of the 1981 tax reduction legislation. Congress also eliminated a provision to withhold income taxes on interest and dividends.

Chrysler Loan Repayment. Chrysler repaid $1.2 billion in federal government guaranteed loans. Also, Chrysler reached a new contract agreement with the United Auto Workers.

Real GNP. Real GNP increased at an annual rate of 7.6 percent in the third quarter.

Prime Rate Increases. The prime rate was raised to 11 percent from 10.5 percent in August, the first increase in almost 18 months.

Power System Defaults. Washington Public Power Supply System (WPPSS) failed to pay interest due on $2.25 billion of bonds issued to finance two nuclear power plants. This was the largest municipal default in U.S. history.

FOURTH QUARTER

Japanese Autos. Japan agreed to extend the voluntary ceiling on auto exports to the U.S. to 1.85 million units from April 1984 to March 1985, a ten percent increase over the limit ending in March 1984.

Dow Jones Industrials. The Dow Jones Industrial Average closed at 1,287 on November 29th, an all-time high.

Michigan Jobless Rate. The unemployment rate in Michigan fell to 11.6 percent in December 1983 compared to 17.1 percent in December 1982.

Economic Growth. Real GNP expanded at an annual rate of 5 percent in the fourth quarter of 1983.

Auto Sales. Domestically-produced autos sold at an annual rate of 7.4 million units in the fourth quarter, up 21 percent from the year-earlier selling rate.

Auto Profits. The sharp increase in automobile sales during the year resulted in a surge in the profits of the auto manufacturers in 1983. During the fourth quarter alone, profits of the "Big-Three" automakers totaled $2.2 billion, compared with a loss of $164 million in the fourth quarter of 1982.

SUMMARY OF 1984 ECONOMIC FORECAST

In 1984, the U.S. and Michigan economies are expected to expand more rapidly than they have in several years. Unlike the growth in 1983 that was due almost entirely to increases in consumer spending, the economic expansion in 1984 will be spurred by both consumer spending and business investment. Consumer spending is projected to continue growing in 1984 in response to increases in employment and average earnings. Investment activity is forecast to increase strongly in 1984 as businesses undertake needed capital improvements to increase productivity. In addition, the sharp increase in consumer spending is currently placing capacity constraints on many businesses. These investment needs, coupled with the fact that business profits and cash flow are expected to rise significantly, should lead to increased investment activity in 1984.

Nationally, real GNP is forecast to grow 5.9 percent in 1984, up from the 3.4 percent increase in 1983. Real GNP has not increased at this rapid a pace since 1966. Continued growth in consumer spending is expected to push automobile sales up 14.1 percent to 10.5 million units in 1984. In addition, the import share of the U.S. new car market is projected to fall from 26.1 percent in 1983 to 25 percent in 1984. The increase in auto sales will help boost motor vehicle production by an estimated 19.4 percent. This increase in economic activity will generate enough new jobs to reduce the U.S. unemployment rate from 9.6 percent in 1983 to 7.5 percent in 1984. Interest rates are expected to rise due to increased demand for borrowing by consumers, businesses and the federal government, coupled with the Federal Reserve's continuing efforts to limit the growth of the money supply to prevent an acceleration in inflation. While the rise in interest rates will slow economic growth in the last half of 1984, it poses a more serious threat to economic growth in 1985.

In Michigan, motor vehicle production is forecast to rise 13 percent due to stronger auto sales nationally. This increase, along with the general improvement in economic activity that is expected, should increase employment 6.2 percent in 1984. The state's rate of unemployment is forecast to fall to 10.7 percent from 14.2 percent in 1983. An estimated 470,000 people will still be unemployed in 1984. Increases in the number of people employed and average

earnings, combined with only a modest rise in inflation, are expected to generate a 5.2 percent increase in real personal income in 1984, the highest rate of growth since 1977. The state and national economic forecasts are summarized below.

Economic Forecast Summary

	1983	1984 Forecast	Percent Change
UNITED STATES			
Real GNP (Billions of 1972 $)	$1,535.3	$1,626.0	5.9
Auto Sales (Millions)	9.2	10.5	14.1
Import Share (Percent)	26.1	25.0	----
Motor Vehicle Production (Millions)	9.3	11.1	19.4
Housing Starts (Millions)	1.7	1.9	11.8
Unemployment Rate (Percent)	9.6	7.5	----
3-Month Treasury Bill Rate (Percent)	8.6	10.2	----
MICHIGAN			
Real Personal Income (Billions of 1967 $)	$ 35.4	$ 37.2	5.2
Motor Vehicle Production (Millions)	2.84	3.21	13.0
Employment (Thousands)	3,693.0	3,922.0	6.2
Unemployment Rate (Percent)	14.2	10.7	----
Detroit CPI (1967=100)	296.5	310.4	4.7

SUMMARY OF THE NATIONAL ECONOMY

1983 Developments

In 1983, the U.S. economy finally began recovering from the two back-to-back recessions that plagued the country since the end of 1979. Real gross national product (GNP), which is the inflation-adjusted value of the goods and services produced by the economy, increased 3.4 percent in 1983, after declining 1.9 percent in 1982. This was the highest rate of growth since 1978 when economic activity expanded at a rate of 5 percent. The improvement in the economy that occurred in 1983 is clearly evident in the quarterly statistics. After experiencing a decline in real activity in four of the previous five quarters, real GNP grew 2.6 percent in the first quarter of 1983. The economy continued to grow at a rate of 9.7 percent in the second quarter, followed by increases of 7.6 percent and 5 percent in the third and fourth quarters, respectively. The 1983 recovery was much stronger than most economists had predicted.

The rebound in economic growth was led by a sharp increase in consumer spending. Personal consumption expenditures, which make up nearly two-thirds of total GNP, expanded at a rate of 4.2 percent in 1983, largely due to a 10 percent surge in the second quarter. This growth in real consumer spending resulted from a decline in the rate of inflation and an increase in consumers' confidence in the economy.

Inflation, as measured by the U.S. Consumer Price Index for all urban consumers, fell from 10.4 percent in 1981 to 6.1 percent in 1982 and to 3.2 percent in 1983. This sharp drop in inflation helped lower interest rates and raise real disposable income, both of which contributed to consumer spending. The 3-month Treasury bill rate fell from 14.1 percent in 1981 to 10.7 percent in 1982 and fell further to 8.6 percent in 1983. Interest rates on consumer loans followed a similar pattern. In 1982, real disposable income rose only 0.5 percent, but in 1983, largely due to the drop in inflation, real disposable income rose 3.5 percent.

Along with the decline in interest rates and the rise in real disposable income, consumers' confidence in the economy improved in 1983. The University of Michigan's Index of Consumer Sentiment rose a record 19.5 basis points or 29

percent in 1983 compared to the 1982 average. Generally, consumers felt that the economic climate was getting better and would continue to improve. This optimistic outlook, in combination with the fact that many consumers had postponed purchases during the long recession, contributed significantly to the surge in consumer spending. An offshoot of this improvement in attitudes was that many consumers dipped into their savings or saved less to help finance purchases. In fact, the saving rate fell to 4.9 percent in 1983 compared to 5.8 percent in 1982.

The acceleration in consumer spending which led the economy out of the recession was concentrated initially in two sectors--housing and automobiles. In 1982, housing starts totaled only one million units. This depressed level of new housing construction resulted from high mortgage rates and the reluctance or inability of consumers to make long-term financial commitments during a time when income and job security were generally uncertain. Also, by the end of 1982, mortgage rates were declining, new home prices were softening and real incomes were improving. In response to these factors, new housing starts increased a robust 60.3 percent to 1.7 million units in 1983. This not only helped the construction industry, but also the industries which produce household appliances and furnishings.

Auto sales experienced a similar strong recovery in 1983. Despite numerous rebate and other sales incentive programs, auto sales languished during 1982 with sales of domestically-built autos totaling only 5.8 million units. However, in 1983 the improvement in both consumers' financial positions and their confidence in the economy's future helped boost domestic auto sales 17.2 percent to 6.8 million units. The sales of imported autos also improved in 1983 to 2.4 million units from 2.2 million units in 1982, an increase of 9.1 percent. This slower growth, compared to domestic sales, was primarily attributable to the voluntary restraint on the number of Japanese-built autos that could be imported into the U.S. As a result, the import share of the U.S. new car market fell from 27.5 percent in 1982 to 26 percent in 1983.

The improved level of economic activity, spurred by the increase in consumer spending, brought relief to the depressed labor market. By the end of 1983, the number of people employed had increased by almost 4 million from the end of 1982, an increase of 4 percent; however, 9.2 million peoople were still unemployed. The unemployment rate had fallen to 8.2 percent at year-end after peaking at 10.7 percent in December 1982.

1984 Outlook

In 1984, the economic outlook is for continuation of the growth in economic activity that began in 1983; however, growth will begin to slow by the end of 1984 or the beginning of 1985 as a result of rising interest rates. Consumer spending is expected to remain strong as employment continues to rise, inflation remains low and the average worker's income rises modestly. In addition to continued growth in consumer spending, economic growth will also stem from increased investment activity. As the financial condition of businesses continues to improve in 1984, firms are expected to increase their investment to replace equipment and expand capacity.

Based on the expectation that both consumer spending and business investment will increase in 1984, real GNP is forecast to rise 5.9 percent. Real consumption expenditures by households are expected to rise 4.9 percent. Contributing to this increase will be a 14 percent increase in total U.S. auto sales to 10.5 million units. Most of this increase in auto sales is expected to occur in domestically-built autos. Imported auto sales will continue to be restrained by the import quota on Japanese-built cars. Domestic auto sales are forecast to rise 16 percent, while import auto sales are expected to increase only 8 percent. Real business investment is expected to rise 16.1 percent in 1984 from the depressed levels that still prevailed in 1983. These anticipated increases in consumer spending and business investment should generate further growth in employment and lower the unemployment rate to an estimated 7.5 percent from 9.6 percent in 1983.

One important factor that will prevent even faster economic growth in 1984 is high and rising interest rates. Interest rates are expected to rise due to the large federal government deficit, the increased borrowing by consumers and business and the Federal Reserve's apparent commitment to moderate money supply growth to help prevent inflation from accelerating. The federal government will need to borrow an estimated $183.3 billion in 1984 to finance the huge federal deficit. In addition, businesses will be borrowing additional money in 1984 to help finance needed capital improvements. Consumer borrowing is also expected to increase with the increase in consumer spending. This surge in the demand for loans is expected to force interest rates higher in 1984. The 3-month Treasury bill rate is forecast to rise 190 basis points by the end of 1984 as compared to the level at the end of 1983. This increase in interest rates will slow economic growth by year-end and will pose a serious threat to continued economic expansion in 1985.

THE MICHIGAN ECONOMY

- Employment and Unemployment
- Personal Income
- Prices
- Consumer Spending
- State and Regional Comparisons
- Population

EMPLOYMENT AND UNEMPLOYMENT

1983 Developments

In 1983, Michigan's labor market began recovering from the severely depressed employment situation in 1982. Employment opportunities expanded as auto production and consumer confidence stepped up in response to lower inflation and interest rates. However, the annual average unemployment rate only fell from the peak recessionary rate of 15.5 percent in 1982 to 14.2 percent in 1983. Despite this improvement, the unemployment rate remained well within the double-digit range as 610,000 workers remained jobless.

Michigan's labor force--the number of people employed or actively seeking employment--increased from 4,278,000 in 1982 to 4,303,000 in 1983, an increase of 0.6 percent (see Table 1). Most of the growth of the labor force occurred because the number of people working increased 2.1 percent from 3,617,000 in 1982 to 3,693,000 in 1983. During the same period, unemployment fell from 661,000 to 610,000, a drop of 7.7 percent. Because employment growth exceeded growth in the labor force, the unemployment rate fell to 14.2 percent in 1983, a decrease of 1.3 percent. Unfortunately, Michigan's 1983 unemployment rate was the second highest in the nation.

While the overall rate of unemployment averaged 14.2 percent in 1983, the jobless rate in selected Michigan labor markets varied substantially. As shown in Table 2, the Upper Peninsula recorded the highest unemployment rate at 17.5 percent, a decrease of 1.4 percentage points from 1982. Flint experienced the next highest unemployment rate at 16.6 percent followed by Detroit at 14.6 percent. The lowest unemployment rates shown in the table include Ann Arbor and Lansing-East Lansing with rates of 9.5 percent and 10.1 percent, respectively. Unemployment rates for these selected labor markets spanned over 8 percentage points in 1983.

As the number unemployed declined, so did the number of workers claiming unemployment benefits. The number of unemployed has exceeded 500,000 in each year since 1979. During this period, many unemployed workers exhausted both their regular unemployment benefits and extended benefits covering thirteen more weeks. Additional aid in the form of supplemental benefits was available until June 1983, when the federal program was terminated for Michigan's unemployed.

Table 1

Michigan Labor Force and Employment, Selected Years
(Thousands)

Labor Force	1979	1982	1983	1984 Forecast	Percent Change 1982–83	Percent Change 1983–84
Total Labor Force	4,312.0	4,278.0	4,303.0	4,392.0	0.6	2.1
Employment	3,977.0	3,617.0	3,693.0	3,922.0	2.1	6.2
Unemployment	335.0	661.0	610.0	470.0	- 7.7	-22.9
Unemployment Rate	7.8	15.5	14.2	10.7	—	—
Wage and Salary Employment	3,637.0	3,193.3	3,186.4	3,325.6	- 0.2	4.4
Manufacturing	1,160.1	876.9	880.9	957.5	0.5	8.7
Durable Goods	935.1	684.5	687.8	753.1	0.5	9.5
Nondurable Goods	225.0	192.4	193.0	204.4	0.3	5.9
Nonmanufacturing	1,855.9	1,738.6	1,729.6	1,798.8	- 0.5	4.0
Construction	139.5	89.5	85.9	97.8	- 4.0	13.8
Trans., Comm. & Utilities	160.6	143.3	136.7	142.3	- 4.6	4.1
Wholesale Trade	170.4	150.7	147.8	154.2	- 1.9	4.3
Retail Trade	590.9	542.6	542.8	566.1	0.0	4.3
Finance, Ins. & Real Estate	154.5	151.9	151.2	157.0	- 0.5	3.8
Services	626.8	650.3	656.5	672.5	1.0	2.4
Mining	13.2	10.4	8.7	8.9	-16.3	2.6
Government	621.0	577.8	576.0	569.3	- 0.3	- 1.2

Source: Michigan Employment Security Commission.

Table 2

Michigan Labor Market Unemployment Rates, 1981-1983[1]
(Percent)

SMSA	1981	1982	1983
Ann Arbor	7.8	9.9	9.5
Battle Creek	11.4	16.1	14.5
Flint	15.1	20.8	16.6
Detroit	13.0	16.0	14.6
Grand Rapids	9.1	11.8	11.4
Kalamazoo	8.7	11.0	10.9
Lansing-East Lansing	10.2	12.1	10.1
Upper Peninsula	13.3	18.9	17.5

[1]Employment and unemployment data for these SMSAs are available in appendix table B-7.

Source: Michigan Employment Security Commission.

Table 3 provides data on the number of unemployed claiming regular unemployment benefits. This table reveals that although the average number of unemployed reached its highest level in the first half of 1983, only 27.8 percent of these people collected regular unemployment benefits, compared with 38.4 percent of those unemployed in the same period a year earlier.

As the unemployed, including unemployed parents with dependent children, exhausted their benefits, they were forced to seek other government aid programs. The average annual caseload for aid to unemployed parents with dependent children increased from 42,051 in 1982 to 47,484 in 1983, an increase of 12.9 percent.

Table 3

Michigan Unemployed and Regular Unemployment Beneficiaries, 1981-1983[1] (Thousands)

Period	Average Number Unemployed	Average Claiming U.I. Benefits	
		Number	% of Unemployed
1981			
Jan.-June	539.3	205.3	38.0
July-Dec.	517.5	178.8	34.6
1982			
Jan.-June	660.6	253.5	38.4
July-Dec.	662.0	206.5	31.2
1983			
Jan.-June	685.0	190.4	27.8
July-Dec.	535.6	98.1	18.3

[1]Data reflects average week for insured unemployment and does not include extended or supplemental federal benefits.

Source: Michigan Employment Security Commission.

Labor market statistics for Michigan are compared with the Detroit SMSA in Table 4. This table illustrates that metropolitan Detroit has experienced a higher unemployment rate than the rest of Michigan since 1981. While the Detroit SMSA unemployment rate reached 14.6 percent in 1983, the average rate for areas outside Detroit was 13.8 percent. In addition, employment in the Detroit area rose from an annual average of 1,663,800 in 1982 to 1,689,600 in 1983, an increase of 1.6 percent, compared with an increase of 2.1 percent in employment at the state level for the same period. Employment growth in the Detroit area was severely constrained in 1983 due to the heavy reliance on manufacturing jobs.

Table 4

Detroit SMSA and Balance of State Employment, 1981-1983
(Thousands)

Area	Labor Force	Employment	Unemployment	Unemployment Rate
1981				
Detroit SMSA	2,006.6	1,744.8	261.8	13.0
All Others	2,302.8	2,035.3	267.5	11.6
Michigan	4,309.4	3,780.1	529.3	12.3
1982				
Detroit SMSA	1,980.3	1,663.8	316.5	16.0
All Others	2,298.3	1,953.5	345.0	15.0
Michigan	4,278.6	3,617.3	661.3	15.5
1983				
Detroit SMSA	1,979.1	1,689.6	287.5	14.6
All Others	2,324.0	2,003.2	320.8	13.8
Michigan	4,303.1	3,692.8	610.3	14.2

Source: Michigan Employment Security Commission.

Wage and Salary Employment

Wage and salary employment, another measure of employment which excludes agricultural and self-employed workers, fell in 1983, continuing the downward trend experienced since 1979. In 1979, annual average wage and salary employment reached a peak of 3,637,000 employees. Wage and salary employment reached a low of 3,186,400 in 1983, a drop of 0.2 percent from 1982. Thus, total wage and salary employment remains well below the 1979 peak level. The sections and tables that follow present a detailed examination of wage and salary employment in the manufacturing, nonmanufacturing and government sectors of the economy.

Manufacturing Employment

During the last recession, a large portion of the job loss occurred in manufacturing as purchases of autos, houses, appliances and other durable goods were particularly hard hit by rising interest rates and falling real income. While interest rates fell in 1983 from the peak levels recorded in 1982, they still remained high relative to historic levels and continued to constrain production in the manufacturing sector.

Manufacturing employment rose from 876,900 in 1982 to 880,800 in 1983, an increase of 0.4 percent (see Table 5). This increase has been the major component of the rise in total wage and salary employment in 1983. Nonetheless, total manufacturing employment has declined by 279,300 since 1979.

Within the manufacturing sector, durable goods employment increased 0.5 percent and total nondurable employment rose 3.1 percent from 1982 to 1983. Motor vehicles and nonelectrical machinery, the two largest sectors of durable goods, increased 5.8 percent and declined 11.7 percent, respectively, during the same period. The gain in employment in motor vehicles was largely offset by the job loss in nonelectrical machinery.

Table 5

Michigan Manufacturing Industry Employment, 1981-1983
(Thousands)

Industry	1981	1982	1983	% Change 1982-83
Total Manufacturing	979.0	876.9	880.8	0.4
Durable Goods	778.1	684.5	687.8	0.5
Lumber, Wood	10.5	9.7	10.5	8.2
Furniture, Fixtures	23.0	21.6	21.6	0
Primary Metals	65.0	51.1	50.5	- 1.2
Fabricated Metals	117.5	101.7	102.6	0.9
Nonelectric Machinery	154.8	132.1	116.6	-11.7
Electric Machinery	33.0	30.4	29.9	1.6
Motor Vehicles	319.4	286.5	303.2	5.8
Other Transportation	15.5	16.2	17.8	9.9
Other Durables	39.4	35.2	35.1	0.3

Table 5 (continued)

Michigan Manufacturing Industry Employment, 1981-1983
(Thousands)

Industry	1981	1982	1983	% Change 1982-83
Nondurable Goods	200.9	192.4	193.0	0.3
Food, Kindred	46.9	46.1	45.1	- 2.2
Textiles, Apparel	19.3	17.3	19.0	9.8
Paper	21.7	20.4	20.1	1.5
Printing, Publishing	33.2	32.7	33.0	0.9
Chemicals, Petroleum	46.6	41.7	42.8	2.6
Other Nondurables	33.2	30.9	33.0	6.8

Source: Michigan Employment Security Commission.

Nonmanufacturing

Nonmanufacturing employment declined from 1,738,600 in 1982 to 1,729,600 in 1983, a drop of 0.5 percent (see Table 6). Decreases in transportation, communications and utilities, and wholesale trade contributed most to this fall in employment. While the service industry is the largest sector within nonmanufacturing it was also the only one to record an improvement as employment rose by one percent to 656,500 workers in 1983.

Retail trade, the second largest nonmanufacturing sector in terms of employment, remained nearly constant in 1983. Other industries recording a decline in employment included: construction, down 4 percent; mining down 16.3 percent; transportation, communications and utilities, down 4.6 percent; real estate, down 0.5 percent. Although construction activity increased as mortgage rates declined, home financing remained high compared with historical rates. In 1983, Michigan mortgage rates averaged 13.6 percent. Since 1979, construction employment has declined 61.6 percent.

Table 6

Michigan Nonmanufacturing Industry Employment, 1981-1983
(Thousands)

Industry	1981	1982	1983	% Change 1982-83
Total Nonmanufacturing	1,786.9	1,738.6	1,729.6	- 0.5
Construction	106.8	89.5	85.9	- 4.0
Mining	12.9	10.4	8.7	-16.3
Transp., Comm. & Util.	147.9	143.3	136.7	- 4.6
Wholesale Trade	157.9	150.7	147.8	- 1.9
Retail Trade	556.8	542.6	542.8	0.0
Finance, Insurance & Real Estate	155.0	151.9	151.2	- 0.5
Services	649.6	650.3	656.5	1.0

Source: Michigan Employment Security Commission.

Government

Public employment is another major sector of the Michigan economy and in 1983, comprised 18.1 percent of wage and salary employment in the state. The number of workers employed by all categories of government--federal, state and local--declined from 577,800 in 1982 to 576,000 in 1983, a decline of 0.3 percent (see Table 7).

Local government is the largest government employer. In 1983 local government employment declined slightly to 379,400. State government employment, over half of which is in state universities, also fell to 141,000, a decline of almost one percent in 1983. The 1983 decline in combined state and local employment continues the downward trend since 1980. Federal government employment, the only category that had increased in 1982, also decreased in 1983.

Table 7

Michigan Government Employment, 1981-1983
(Thousands)

Sector	1981	1982	1983	% Change 1982-83
Government	598.4	577.8	576.0	- 0.3
Federal	55.9	55.9	55.5	- 0.7
State	147.8	142.2	141.1	- 0.8
Local	394.7	379.7	379.4	- 0.1

Source: Michigan Employment Security Commission.

1984 Outlook

The employment outlook is projected to improve slightly in 1984 to 3,922,000, an increase of 6.2 percent over 1983. While employment is projected to increase, the labor force is expected to grow at a lower rate to 4,392,000, an increase of 2.1 percent. The number of people unemployed is expected to fall by 22.9 percent from 610,000 in 1983 to 470,000 in 1984. With the expected increase in jobs, the unemployment rate is projected to fall from 14.2 percent in 1983 to 10.7 percent in 1984, a 3.5 percentage point drop. This jobless rate is an improvement over the record high annual rate of 15.5 percent recorded in 1982; however, it remains well above the 1979 rate of 7.8 percent and will exceed the projected national unemployment rate by 43 percent.

In 1984, wage and salary employment is expected to increase 4.4 percent after remaining flat in 1983. This increase is boosted by the 8.7 percent growth expected in manufacturing employment. Motor vehicle employment, the largest component of manufacturing, is expected to continue growing as national auto sales remain strong, and consequently total durable goods employment is forecast to rise 9.5 percent. Nondurable goods employment is expected to grow at a slower rate of 5.9 percent.

In addition, nonmanufacturing employment is forecast to rise by 4 percent to 1,798,800 in 1984. Finally, government employment is projected to fall 1.2 percent in 1984 to a level of 569,300. Total federal, state and local government employment in 1984 will be 7.2 percent lower than it was in 1979.

PERSONAL INCOME

1983 Developments

The best indicator of overall economic activity in Michigan is personal income. Personal income is the total amount of income received by individuals, including income from wages and salaries, pensions, interest and government transfer payments. It is a good measure of economic activity because a broad number of economic variables, such as employment, average hours worked, average pay levels, interest rates, and the saving rate, affect its level (see Table 8). In 1982, the

Table 8

Michigan Personal Income, 1970-1983
(Millions)

Year	Michigan Personal Income (Current Dollars)	Percent Change	Real Michigan Personal Income (1967 Dollars)	Percent Change
1970	$ 35,976	3.2	$30,644	- 2.8
1971	39,068	8.6	32,102	4.8
1973	48,382	11.8	35,972	4.9
1974	51,740	6.9	34,702	- 3.5
1975	54,540	5.4	34,024	- 2.0
1976	61,324	12.4	36,308	6.7
1977	69,291	13.0	38,410	5.8
1978	77,777	12.2	40,071	4.3
1979	85,983	10.6	39,298	- 1.9
1980	91,363	6.3	36,041	- 8.3
1981	97,891	7.1	35,327	- 2.0
1982	99,747	1.9	34,598	- 2.1
1983	104,963	5.2	35,401	2.3

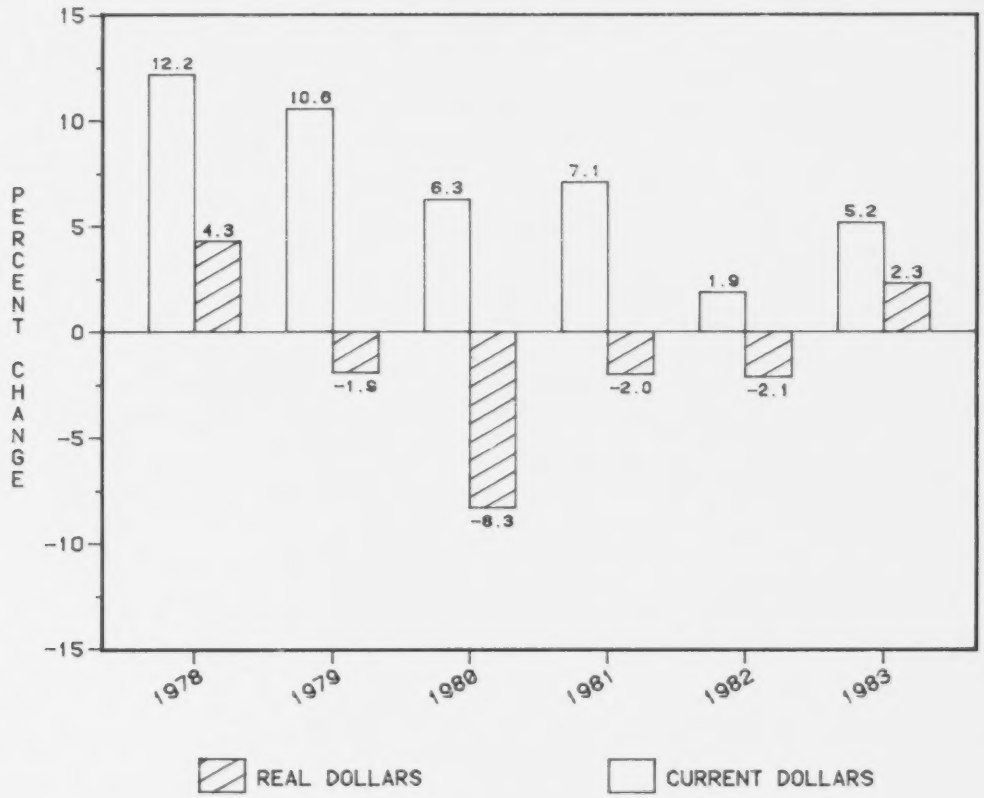
Source: U.S. Department of Commerce, Bureau of Economic Analysis; Michigan Department of Management and Budget.

Michigan economy was still in the midst of the recession and consequently personal income increased only 1.9 percent in current dollars, its lowest rate of growth since 1961 when it declined by 0.3 percent. However, in 1983 economic activity finally began to improve and, as a result, personal income grew 5.2 percent to $105 billion.

Personal income is even a better measure of economic activity when it is adjusted for inflation. Chart 1 compares the change in Michigan personal income since 1978 in both current and real dollars. This chart highlights the fact that, despite substantial increases in current-dollar personal income

Chart 1

Percent Change in
Michigan Personal Income, 1978 to 1983



from 1979 to 1982, Michigan personal income--after adjusting for inflation--actually fell for four consecutive years. As shown in the chart, 1983 was the first year since 1978 that personal income increased in real terms.

The serious economic decline that Michigan experienced in the past few years is further illustrated in Table 8, which presents real Michigan personal income from 1970 to 1983. Even after the improvement in 1983, real personal income remained slightly below the real income level attained ten years ago in 1973. If real personal income is further adjusted to remove transfer payments (e.g., social security benefits and general assistance payments), the decline is even more pronounced. Real personal income net of transfers was 14 percent lower in 1983 compared to 1979.

As shown in Table 9, there are a number of sources of Michigan personal income, but the major component is wages and salaries which accounted for 60 percent of personal income in 1983. As a result of the economic recovery which boosted employment and the average hours worked per week, particularly in the manufacturing industries, wage and salary disbursements increased 4.9 percent to $62.5 billion in 1983. Wage and salary payments rose in 1983 in each of the three major sectors--manufacturing, nonmanufacturing, and government.

Table 9

Components of Michigan Personal Income, 1983

Income Source	Percent of Total
Wages & Salaries	59.6
Other Labor Income	8.1
Proprietors' Income	4.1
Property Income	15.9
Transfer Payments	15.8
Residence Working Out-of-State	0.5
Social Security Contributions	- 3.9
Total	100.0

Source: Michigan Department of Management and Budget.

Wages and salaries generated by the manufacturing industries increased 6.7 percent to $24 billion in 1983. This compares to a sharp decline of 7 percent in 1982. Wages and salaries derived from Michigan's manufacturing industries tend to be very cyclical because this sector is dominated by firms in durable goods industries, or more specifically, the motor vehicle industry. Durable goods--including automobiles, furniture and appliances--typically last for several years and are relatively expensive purchases. When consumers' earnings are unstable or declining, purchases of durable goods are postponed. In 1983, consumers' financial positions began to improve and consequently purchases of durable goods increased. This resulted in an increase of 0.4 percent in manufacturing employment and a 5.7 percent jump in the average hours worked per worker per week. Both of these factors contributed to the increase in wages and salaries paid by the manufacturing industries in 1983.

There are a number of other industries that are very important to Michigan's economy. Collectively these nonmanufacturing industries generate more wages and salaries in Michigan than the motor vehicle dominated manufacturing industries. In 1983, the nonmanufacturing industries paid $27.8 billion in wages and salaries, an increase of 3.4 percent from the 1982 level. The largest increases occurred in the wholesale trade and service industries with gains of 7.1 percent and 6.6 percent, respectively.

The service industry has experienced the steadiest growth of any business sector in Michigan's economy over the past ten years. The 1983 increase in wage and salary payments was largely due to a one percent increase in employment and a modest increase in average earnings per worker.

Other nonmanufacturing industries that experienced relatively moderate growth in wage and salary payments in 1983 were retail trade and the finance, insurance and real estate sector. An increase in consumer spending was the major factor which led the national economy out of the recession. This increased activity boosted wages and salaries 1.9 percent in the retail sector during 1983. The long-awaited rebound in the housing market that occurred in 1983 helped revive the depressed real estate market. This was the major factor leading to a 5.4 percent increase in the wages and salaries paid by the finance, insurance and real estate sector. Experiencing declines in wage and salary payments were the construction industry, down 3.3 percent; the mining industry, down 7.8 percent; and the transportation, communications and utility sector, down 2.3 percent.

In addition to wages and salaries, individuals also receive work-related income in the form of proprietors' income and employee benefits. Income from employee benefits, commonly called other labor income, includes money received from insurance benefits, pensions and compensation payments for work-related injuries. In 1983, other labor income totaled $8.5 billion, which was 9.8 percent above the 1982 level. Proprietors' income, the income received by self-employed workers, rose sharply to $4.3 billion in 1983 from $3.6 billion a year earlier, an increase of 19.2 percent. This significant increase resulted from higher farm earnings due to the federal government's PIK program and from the improvement in economic activity, particularly the increase in consumer spending which boosted the earnings of many independent retailers.

Along with labor-related income, personal income includes dividends, interest, rent and transfer payments. In 1982, income derived from property (dividends, interest and rent) increased 13 percent, largely due to the high level of interest rates. In sharp contrast, 1983 property income increased only 2 percent to $16.7 billion. Two factors were primarily responsible for this slowdown in the growth of property income: a drop in the saving rate and a decline in interest rates. Consumers financed a portion of their increased spending in 1983 by saving less, as the national saving rate fell from 5.8 percent in 1982 to 4.8 percent in 1983. In addition, interest rates were substantially lower in 1983 than in 1982. For example, the 3-month Treasury bill rate declined to 8.82 percent in June 1983 from 12.11 percent in June 1982. Property income growth was also held back by continued weak earnings from dividends. While profits for many companies were up significantly in 1983, these profits were used by firms to offset losses sustained during the recession. Consequently, dividends paid to individuals did not improve significantly in 1983.

Another important source of personal income is transfer payments. Government transfer payments are paid to individuals who have lost their jobs due to economic factors, who are unable to work due to health problems or family responsibilities, or who are retired. In 1983, transfer payments in Michigan totaled $16.5 billion, an increase of 4 percent. In 1982, transfer payments rose 11.3 percent. This slowdown in the growth rate of transfer payments was due in part to the decline in unemployment compensation benefits. In 1983, total state unemployment benefits fell to $1.7 billion from $2 billion in 1982. A portion of this decline is attributable to the improved economy which created employment

opportunities for some people who were unemployed. In particular, a large number of laid off automobile workers were called back to work in 1983. Unemployment benefits were also reduced in 1983 by the elimination, at mid-year, of a federally-funded extended benefit program and by an increase in the number of people who exhausted their unemployment benefit eligibility.

1984 Outlook

As 1983 came to an end, employment was rising in Michigan, consumer spending, particularly for automobiles, was strong nationally and inflation was very low. For 1984 a continuation of these positive factors should contribute to sustained economic growth. Therefore, personal income in Michigan is projected to increase 10.1 percent to $115.6 billion in 1984, which is a faster rate of growth than the 5.2 percent increase in 1983. Adjusting for inflation, personal income is forecast to grow 5.2 percent, which would be the largest real growth in personal income since 1977 (see Table 10).

With the expectation that economic growth in 1984 will continue to increase employment, the most significant increase in income is expected to occur in labor-related income. Wages and salaries are expected to increase 11.1 percent in 1984 compared to 4.9 percent in 1983. This increase will be led by an estimated 16.2 percent increase in manufacturing wages and salaries due to both employment increases and an increase in average earnings of approximately 5 percent. The continued growth in the economy is also expected to boost the income received by individuals from other labor income and proprietors' income, by 17.4 percent and 18.8 percent, respectively.

Income generated from property--in the form of interest, dividends and rent--is forecast to grow much faster in 1984 than in 1983. Interest rates are expected to increase in 1984 and the saving rate is forecast to rise to a more normal level from its historically low level in 1983. Both of these factors will boost interest earnings. In addition, the financial positions of businesses in general are expected to strengthen in 1984, and thus dividend payments should rise substantially. Therefore, property income is forecast to increase 10.8 percent to $18.5 billion in 1984.

Table 10

Michigan Personal Income 1982, 1983 and 1984 Forecast
(Millions)

Source	1982	1983	1984 Forecast	Percent Change 1982-83	Percent Change 1983-84
Wage & Salary Disbursements/Place of Work	$59,639	$62,540	$69,501	4.9	11.1
Farms	246	275	289	11.8	5.1
Manufacturing	22,533	24,053	27,957	6.7	16.2
Durables	18,318	19,580	23,152	6.9	18.2
Nondurables	4,215	4,473	4,805	6.1	7.4
Nonmanufacturing	26,880	27,801	30,470	3.4	9.6
Construction	2,055	1,952	2,273	- 3.3	16.4
Transportation, Communication & Utilities	3,501	3,420	3,880	- 2.3	13.5
Wholesale Trade	3,400	3,643	3,811	7.1	4.6
Retail Trade	5,340	5,440	6,005	1.9	10.4
Finance, Insurance & Real Estate	2,597	2,736	2,917	5.4	6.6
Services	9,731	10,374	11,289	6.6	8.8
Mining	256	236	295	- 7.8	25.0
Government	9,860	10,281	10,648	4.3	3.6
Other Industries	121	130	137	7.4	5.4
Other Labor Income	7,720	8,480	9,953	9.8	17.4
Proprietors' Income	3,644	4,342	5,159	19.2	18.8
Total Labor & Proprietors' Income/Place of Work	71,003	75,362	84,613	6.1	12.3
Less: Contributions for Social Insurance	3,876	4,110	4,640	6.0	12.9
Plus: Residence Adjustment	492	519	552	5.5	6.4
Net Labor & Proprietors' Income/Place of Resid.	67,619	71,771	80,525	6.1	12.2
Dividends, Interest & Rent	16,333	16,655	18,455	2.0	10.8
Transfer Payments	15,796	16,538	16,629	4.7	0.6
Total Personal Income	99,747	104,963	115,608	5.2	10.1
Real Personal Income (1967 Dollars)	34,598	35,401	37,245	2.3	5.2

Source: U.S. Department of Commerce, Bureau of Economic Analysis and Michigan Department of Management and Budget.

While economic growth will boost the growth of labor-related income and property income in 1984, it will slow the growth of total transfer payments. Unemployment benefits are expected to decline in 1984 due to the anticipated increase in employment, and the public assistance caseload is forecast to fall in the last half of the year. As a result, transfer payments, including social security, unemployment and public assistance payments, are expected to increase only 0.6 percent to $16.6 billion in 1984. Real personal income after transfers is estimated to increase by 6.9 percent in 1984.

PRICES

1983 Developments.

The continuing decline in inflation was an important factor which contributed to the general economic recovery in calendar year 1983. The overall increase in the Detroit Consumer Price Index was 2.8 percent, the lowest increase since 1965. The low inflation rate, along with increased employment and earnings, enabled Michigan residents to enjoy an increase in real income during the year. The rate of increase in prices was lower than the 1982 increase of 4 percent prior to the economic recovery. During the year, inflation was higher in the spring and early summer due to increases in natural gas prices and federal gasoline taxes, as well as accelerating economic growth.

Major factors contributing to the decline in the inflation rate were a drop in food prices and a moderate 0.7 percent increase in transportation costs. Food prices fell slightly because of plentiful supplies--increases due to last summer's drought and an early winter freeze were not reflected until January 1984. Also helping to hold down food prices in 1983 was the price war among Detroit area supermarkets. Transportation costs were held down by a drop in gasoline prices reflecting the worldwide oil glut.

Moderate price increases for automobiles also helped restrain inflation. Rising medical costs slowed, although the rate of inflation was still almost twice that of the general price level. Table 11 shows the changes in major components of the Detroit Consumer Price Index. In 1983, the only large price increases occurred in the categories of medical costs, fuels, public transportation and other services. The fuel increase was due, in part, to problems in federal natural gas market regulations which resulted in the displacement of less-expensive gas by higher-cost gas in the distribution system. Gas prices also increased as old contracts expired and were renegotiated using the higher cost gas.

Overall, Michigan's rate of inflation continued to be below the U.S. inflation rate. The U.S. Consumer Price Index increased 3.2 percent compared with the 2.8 percent increase in the Detroit CPI.

Table 11

Detroit Consumer Price Index 1982, 1983 and 1984 Forecast
(Percent Change)

Group	1982 Annual Average	1983 Dec. '82 to Dec. '83	1983 Annual Average	1984 Forecast Dec. '83 to Dec. '84	1984 Forecast Annual Average
All Items	4.0	2.6	2.8	5.2	4.7
Food	3.8	- 1.4	- 0.1	5.1	5.2
Housing	3.2	3.5	4.3	4.0	3.7
Homeowners' Costs[1]	1.2	1.6	1.6	4.2	3.9
Fuels	9.3	9.3	10.2	5.4	5.1
Household Furnishings & Operations	3.8	2.7	2.0	3.3	3.0
Apparel and Upkeep	1.9	.8	2.7	2.3	2.2
Transportation	4.3	2.6	0.7	5.1	5.3
Private	4.3	1.9	0.2	5.4	5.1
Gasoline[2]	- 5.3	- 2.0	- 3.3	2.8	2.6
Public	4.1	16.2	12.0	8.0	8.0
Medical Care	8.2	9.8	5.5	6.1	6.0
Entertainment	5.1	1.3	4.3	4.6	4.4
Other Goods and Services	4.4	5.8	11.1	7.2	7.0

[1]For 1983 homeowners costs are measured from December to December.

[2]U.S. Consumer Price Index.

Source: U.S. Department of Labor, Bureau of Labor Statistics and Michigan Department of Management and Budget.

1984 Outlook

Inflation is expected to remain moderate during 1984, although the rate will be higher than in 1983. Inflation--measured by the all-urban Detroit CPI--is estimated to increase to 4.7 percent on an annual average basis in 1984 (see Table 11). This increase reflects an increase in food prices and the general rise in economic activity. The food price increase stems, in part, from such short-term factors as the severe freeze in the early part of the winter and reduced crop carryforwards because of the "payment-in-kind" program. A somewhat longer-term effect is the reduced production of meat expected because of the poor profit outlook. Also, the economic recovery is expected to allow some improvement in profit margins for retailers and transportation.

Other prices are also expected to rise more rapidly during 1984 as the improving economy allows price increases to be maintained on more products and services. Some raw material and basic commodity prices are beginning to rise in early 1984. With unemployment reduced, wage increase pressure will be rising while the gains in productivity that characterize the early phases of a recovery have largely occurred. By late in 1984 the inflation rate could reach as high as 6 to 7 percent.

For the entire year price increases are expected to be moderate. Slower price increases for heating fuel should help offset slightly higher home prices. The recovery in Michigan is not expected to be strong enough to cause a rapid escalation in home rents. Since January 1983 home prices have been calculated as a rental equivalent in the all urban consumer price index. This lessens the effect of interest rates in increasing housing costs. The relatively moderate price increases in transportation will be due to a small price rise in gasoline reflecting improving demand tied to the economy but does not anticipate any major disruption of world supplies.

CONSUMER SPENDING

1983 Developments

Consumer spending in 1983, as measured by Michigan sales tax collections, surged upward 10 percent following the negative growth level recorded in 1982 (see Table 12). Adjusted for inflation, consumer spending increased 6.9 percent during the same period.

Table 12

Michigan Sales Tax Collections, 1977-1984
(Millions)

Period	I	II	III	IV	Total	Percent Change
1977	$293.0	$307.0	$326.7	$326.7	$1,253.4	14.5
1978	322.9	347.4	365.6	365.6	1,401.5	11.8
1979	362.3	375.5	391.2	389.0	1,518.0	8.3
1980	384.8	368.5	366.6	383.7	1,503.6	- 0.9
1981	392.2	398.0	407.7	396.4	1,594.3	6.0
1982	389.3	389.3	398.5	394.6	1,571.7	- 1.4
1983	417.5	418.4	444.0	447.7	1,727.6	10.0
1984[1]	484.4	443.6	482.1	478.9	1,889.0	9.3

[1]Forecast.

Source: Actual collections from the Michigan Department of Treasury and 1984 estimate from the Department of Management and Budget.

The 1983 level of collections was 13.8 percent above the 1979 sales tax receipts and 10 percent above 1982 tax receipts. In contrast to the last three years, building material sales tax collections recorded a strong increase of 13.3 percent over 1982 levels (see Table 13). In addition, the related category

of furniture sales tax collections rose 12.7 percent. This growth reflects gains in the housing industry as Michigan mortgage rates fell from an average annual rate of 16.66 percent in 1982 to 13.60 percent in 1983, a difference of 3.06 percentage points. Mortgage rates fell to a low of 12.81 percent in June before rising again in the fall. As houses became more affordable, the number of Michigan building permits increased from 13,748 in 1982 to 21,854, an increase of 59 percent from the dismal market for housing recorded in 1982.

Table 13

Michigan Sales Tax Collections by Component, 1982 and 1983[1]
(Millions)

Component	1982	Percent Change	1983	Percent Change
Building Materials	$ 82.4	-13.6	$ 93.4	13.3
General Merchandise	153.5	- 3.5	162.2	5.7
Food	261.4	1.8	275.6	5.4
Automotive	376.8	0.1	440.9	17.0
New & Used Vehicles	204.4	- 0.7	268.9	31.6
Service Stations, Other	172.4	1.2	172.0	- 0.2
Apparel	70.1	- 0.7	76.0	8.4
Furniture	63.7	- 7.1	71.8	12.7
Miscellaneous Retail	155.7	0.4	171.0	9.8
Nonretail	407.5	- 2.6	436.9	7.2
Gas & Electricity	166.6	10.6	169.0	1.4
Other	240.9	-10.0	267.8	11.2
Total	$1,571.1	- 1.8	$1,727.6	10.0

[1]Includes penalty, interest, and license fees.

Source: Michigan Department of Treasury.

Although new and used auto sales tax collections were up by 31.6 percent in 1983 from the previous year, they were still nearly 16 percent under 1979 collections. In addition, a strong upswing in consumer confidence was reflected in

consumers' willingness to borrow despite high financing rates around 13 percent (see Table 14). Over the course of 1983, consumer sentiment, as posted in a University of Michigan survey, increased from 75.3 in the first quarter to 91.5 in the second quarter, a rise of 16.2 percentage points. This level of confidence remained nearly constant through the rest of the year marking the highest level of consumer confidence since 1979. Although consumers were confident, auto sales were somewhat dampened by inventory shortages, higher car prices and high unemployment.

Nonretail sales tax collections, the second largest sales tax category, increased 7.2 percent in 1983, although gas and electricity sales--comprising over one-third of the total--rose only 1.4 percent. As shown in Table 13, revenue from most other categories increased due to solid growth of those economic factors which affect consumer spending.

Table 14

U.S. Consumer Installment Credit, 1979-1983
(Millions)

Year	Outstanding Credit	Percent of Personal Income
1979	$312,024	15.99
1980	313,472	14.47
1981	331,697	13.62
1982	344,798	13.37
1983: I	342,021[1]	12.87
II	348,316[1]	12.84
III	363,095[1]	13.15
IV	378,626[1]	13.35

[1]Quarterly average expressed at an annual rate.

Source: Federal Reserve Bulletin, Federal Reserve System, Board of Governors, selected issues, 1983.

Inflation rose a modest 2.8 percent and personal income rose by 6.5 percent in 1983. Thus, consumers experienced a real increase in their purchasing power. In addition, unemployment fell from an annual average of 15.5 percent in 1982 to 14.2 percent in 1983. While these rates are high compared with historical averages, the decline in the rate represented a welcome relief to consumers hesitant to make long-term financial commitments during a time of uncertainty over job security. The falloff in purchases of major durables in 1983 resulted in a lower rate of consumer debt burden compared with personal income (see Table 14). Lower debt obligations, as a percent of personal income, recorded in the first half of 1983 placed consumers in a more favorble position to finance purchases as the economy expanded.

1984 Outlook

In 1984, consumer spending will continue the momentum illustrated in the fourth quarter of 1983. The most important indicator of consumer spending, personal income, is expected to increase 9 percent in 1984--over one-third more than the 6.5 percent increase recorded in 1983.

Inflation, as measured by the Detroit Consumer Index, fell to 2.8 percent in 1983 and is expected to rise to 4.7 percent in 1984. While consumers benefited from the lowest rate of increase in prices of consumer goods since 1965, this gain was somewhat offset by high unemployment and interest rates.

While interest rates recorded in 1983 were lower than 1982 rates, they remained high compared to historical levels. Although the money supply (M1) grew at an annual rate of over 13 percent in the first half of 1983, interest rates began moving upward in May. This upward trend plateaued at the end of August. Interest rates are expected to increase in 1984 due to the large federal deficit and rising credit demands by consumers and businesses. The increased cost of borrowing will raise the price of consumer purchases, especially in the durable goods sector. Thus, consumers are likely to shift toward purchasing goods and services which are less interest-rate sensitive.

Despite higher mortgage rates which are projected in 1984, housing starts are expected to rise although at a lower rate than was experienced in 1983. The expanded use of lower cost variable rate mortgages may reduce the negative impact that higher mortgage rates would normally have on residential construction. These activities should encourage the purchase of building materials in 1984.

As employment opportunities improve, consumer sentiment will increase and provide an additional stimulus to consumer spending. However, consumer demand is likely to moderate after a strong increase in early 1984 due to slower growth of income and employment. Given this outlook consumer spending, as measured by Michigan sales tax collections, is expected to increase by 9.3 percent in calendar 1984.

STATE AND REGIONAL COMPARISONS

1983 Developments

Michigan's unemployment rate remained among the highest in the nation and as a result, per capita personal income fell as a percent of the national average. Despite the high jobless rate, growth in personal income picked up moderately, though remaining below the national average (see Table 15). Michigan personal income increased 2 percent from an annual average of $98 billion in the first half of 1982 to $100 billion in the first half of 1983--but fell well below the 4 percent increase in the Detroit CPI during the same period. Thus, consumers experienced a decline in real purchasing power.

All regions did not share equally in income gains from the first half of 1982 to the first half of 1983. Regions with growth rates falling below the national average include the Great Lakes, Plains and Southwest. Regions surpassing the national rate include the Far West, Mideast, New England, Rocky Mountains and Southeast.

In the Great Lakes region, personal income rose 5.1 percent, the second lowest growth of any region. While the growth rate was modest, it represents improvement over the 1982 rate of 3.6 percent and may be attributed to broad-based gains in manufacturing output and related employment.

In the Plains region, the growth rate for personal income was 0.2 percentage points below the national average. This weak performance may be due, in part, to depressed farm income resulting from the falloff in farm exports. Demand for U.S. farm products declined in response to the recessionary economies of foreign countries and to the strength of the U.S. dollar which increased the cost of U.S. goods in world markets.

The Southwest also recorded low growth rates, in contrast to earlier years when income growth surpassed the national average. This may be partially explained by the lingering effects of the 1981 world-wide oil glut. A build-up of oil equipment and supply inventories left oil service companies with excess capacity, and increased competition among oil and gas producers resulted in lower oil prices and a weak recovery.

In the Far West, personal income growth outpaced the national rate as it increased 5.9 percent. During the last recession, this region's economy was buffered by fast-growing technology and defense sectors. In addition, the rebound in housing and construction boosted the forest industry.

Table 15

Personal Income in Selected States and Regions
1981, 1982, and First Half of 1982 and 1983
(Seasonally Adjusted Annual Rate in Billions)

	1981	1982	Percent Change	Jan.-June 1982	Jan.-June 1983	Percent Change
State						
California	$ 292	$ 311	6.5	$ 307	$ 325	5.9
Florida	106	114	7.5	112	120	7.1
Illinois	133	139	4.5	137	144	5.1
Indiana	54	55	1.9	54	57	5.6
Michigan	98	100	2.0	99	104	5.1
New York	202	217	7.4	214	227	6.1
Ohio	111	115	3.6	114	119	4.4
Pennsylvania	124	130	4.8	128	134	4.7
Texas	161	174	8.1	173	179	3.5
Wisconsin	48	51	6.3	50	54	8.0
Region						
Far West	376	398	5.9	393	416	5.9
Great Lakes	444	460	3.6	455	478	5.1
Mideast	481	513	6.7	505	534	5.7
New England	138	149	8.0	146	155	6.2
Plains	180	187	3.9	185	195	5.4
Rocky Mts.	69	74	7.2	73	78	6.8
Southeast	489	520	6.3	513	546	6.4
Southwest	233	252	8.2	250	259	3.6
United States	2,427	2,572	6.0	2,538	2,680	5.6

Source: Survey of Current Business, U.S. Department of Commerce, Bureau of Economic Analysis, August and October, 1983.

New England's personal income growth of 6.2 percent also surpassed the national average. Employment recovered moderately due to the strength of the defense industry. This growth was somewhat offset by a depressed market for capital goods which depends heavily on exports.

In the Southeast, personal income grew 6.4 percent. The strength of this region's economy may be attributed, in part, to a construction rebound as housing starts surged in North Carolina, Georgia and Virginia during the final quarter of 1982 in advance of the 1983 recovery. The housing recovery also boosted related sectors, such as furniture and appliances.

In 1982, Michigan's per capita personal income increased 3.2 percent from a year earlier (see Table 16). This slower growth rate did not keep pace with the national average of 5 percent during the same time period. As a result, Michigan's per capita income, as a percent of the national average, continued the downward trend experienced since 1978 as it fell an additional one percentage point from 1981 to 1982. For 1982, Michigan's per capita personal income actually dropped below the national average. As recently as 1979, Michigan per capita income was almost 7 percent above the national average.

The per capita income of the Great Lakes region followed a similar pattern, growing from $10,645 in 1981 to $11,055 in 1982, or 3.9 percent. As shown in Table 16, per capita income, as a percent of the national average, declined in the Far West, Great Lakes and Plains, but increased in the Mideast, New England and Rocky Mountain regions. The Southeast and Southwest remained at the same percent of the national average.

Gains in income are explained primarily by the growth of employment. Trends in employment and unemployment for the first half of 1982--compared with the first half of 1983--for selected states and regions are shown in Table 17. A comparison of the first half of 1983 with the previous year reveals that employment increased at the national level by 2.4 percent and at the state level by 2.5 percent. This increase in Michigan employment was due to job growth in the manufacturing and government sectors. Most of the fall in employment since the peak level in 1979 may be attributed to job losses in manufacturing. Manufacturing employment declined continually from 1,160,100 in 1979 to 874,100 in 1982, before rising to 880,600 in 1983. Thus, manufacturing employment remains almost 280,000 jobs below the 1979 level.

As a result of the weak economy, states like Michigan with high levels of manufacturing employment recorded greater declines in 1982 than states like California with less cyclical

Table 16

Per Capita Personal Income in Selected States and Regions, 1981 and 1982

	1981	1982	Percent Change	Percent of National Average 1981	Percent of National Average 1982
State					
California	$12,064	$12,567	4.2	114	113
Florida	10,438	10,978	5.2	99	99
Illinois	11,616	12,100	4.2	110	109
Indiana	9,748	10,021	2.8	92	90
Michigan	10,620	10,956	3.2	100	99
New York	11,473	12,314	7.3	108	111
Ohio	10,274	10,677	3.9	97	96
Pennsylvania	10,423	10,955	5.1	98	99
Texas	10,954	11,419	4.2	104	103
Wisconsin	10,227	10,774	5.3	97	97
Region					
Far West	11,768	12,238	4.0	111	110
Great Lakes	10,645	11,055	3.9	101	100
Mideast	11,343	12,087	6.6	107	109
New England	11,126	11,916	7.1	105	107
Plains	10,427	10,789	3.5	99	97
Rocky Mountain	10,184	10,754	5.6	96	97
Southeast	9,134	9,602	5.1	86	86
Southwest	10,631	11,122	4.6	100	100
United States	10,582	11,107	5.0	100	100

Source: Survey of Current Business, U.S. Department of Commerce, Bureau of Economic Analysis, August 1983.

Table 17

Employment and Unemployment Rates in Selected States, 1982 and 1983
(Thousands)

State	October 1982 Employment	October 1982 Unemployment Rate	October 1983 Employment[1]	October 1983 Unemployment Rate	Percent Change in Employment	Change in Unemployment Rate	Percentage Point Change in Manufacturing Employment	Percent Employed in Manufacturing
California	9,807.6	10.3	10,047.8	8.1	2.4	-2.2	1.0	19.2
Florida	3,740.0	9.2	3,916.7	8.6	4.7	-0.6	6.3	12.3
Illinois	4,559.7	12.0	4,528.0	9.4	-0.7	-2.6	2.1	21.9
Indiana	2,003.8	12.0	2,023.7	9.3	1.0	-2.7	3.2	28.6
Michigan	3,181.3	14.9	3,260.3	12.5	2.5	-2.4	9.7	28.2
New York	7,259.2	9.0	7,269.0	7.6	0.1	-1.4	-1.8	18.2
Ohio	4,139.2	13.2	4,181.3	10.6	1.0	-2.6	3.8	26.6
Pennsylvania	4,523.1	11.2	4,520.7	9.5	0.1	-1.7	-0.8	24.5
Texas	6,219.9	7.6	6,208.6	6.9	0.2	-0.7	-0.8	16.3
Wisconsin	1,878.2	10.4	1,880.1	8.6	0.1	-1.8	-0.6	25.8
United States[2]	89,541.0	10.3	91,693.0	8.7	2.4	-1.6	3.8	21.0

[1]Employees on nonagricultural payrolls.

[2]Seasonally adjusted.

Source: Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics, November and December 1983.

industries. States employing a high percentage of their workforce in manufacturing industries included Illinois with 21.9 percent, Indiana with 28.6 percent, Michigan with 28.2 percent, Ohio with 26.6 percent, Pennsylvania with 24.5 percent and Wisconsin with 25.8 percent. During 1983, all these states except Pennsylvania and Wisconsin began to recall laid-off manufacturing workers. Of the states selected, Illinois was the only state to record a total employment drop in 1983. In general, those states with higher proportions of manufacturing employment continued to experience higher jobless rates, while states such as New York and Texas with less dependence on manufacturing employment experienced lower jobless rates.

In October 1983, Michigan's unemployment rate (not seasonally adjusted) reached 12.5 percent, a 2.4 percentage point decrease from a year earlier. By December 1983, this rate had dropped further to 11.9 percent as the economy continued to improve. In contrast, the national unemployment rate of 8.7 percent for October 1983, was significantly lower than Michigan's for the same period.

States with comparatively low unemployment rates included California, Florida, New York, Texas and Wisconsin. Florida benefited from one of the strongest economies in the nation due to increased tourism and a rebound in the housing market.

1984 Outlook

In 1984, Michigan's economy is expected to improve steadily as a result of increased auto sales and improved business investment, assuming no automobile strike. Wage and salary employment is projected to average 3,325,600 which is an increase of 4.4 percent from 1983. In addition, the unemployment rate is forecast to average 10.7 percent in 1984, a drop of 3.2 percentage points. Michigan's jobless rate will continue to remain significantly above the national jobless rate, estimated to average 7.5 percent in 1984.

While Michigan's unemployment rate is expected to drop in 1984, the national rate is projected to fall by a smaller degree and thus the gap between these rates will narrow. For example, Michigan's 1983 annual jobless rate averaged 14.2 percent compared with the U.S. rate of 9.6 percent which is a difference of 4.6 percentage points. This gap is projected to narrow to 3.2 percentage points in 1984, as the U.S. unemployment rate is estimated to reach 7.5 percent compared

with Michigan's forecasted rate of 10.7 percent. In other words, Michigan's 1984 unemployment rate is estimated to be 43 percent higher than the U.S. rate, a slight improvement over the 48 percent higher Michigan rate in 1983.

In the Great Lakes region, the unemployment rate is expected to drop from an annual average of 12 percent in 1983 to just over 10 percent in 1984. The unemployment rates in Wisconsin and Ohio are expected to be a little higher than 9 percent, with a rate of almost 10 percent expected in Illinois. Michigan is expected to continue to record the highest jobless rate in the region.

Even though the economies of the Great Lakes states are recovering, the jobless rate for the region will hover near the 10 percent range during the next two years. This is nearly 2 percentage points above the rates expected in the southern and western states during the same time period. These states are expected to benefit disproportionately from improved employment opportunities as the employment mix shifts away from manufacturing toward services. The lower rate of employment growth within the Great Lakes region is expected to carry over into relatively lower personal income growth.

POPULATION

1983 Developments

According to preliminary population estimates, Michigan had a population of 9,155,000 as of July 1, 1983. This represents a decrease of 106,600 from the last census count of 9,262,078 in 1980. The decline is a continuation of the population loss in 1982.

Metropolitan areas as a whole continued to experience a population decrease; out-migration from metropolitan areas to nonmetropolitan areas also slowed in 1983. The population in the southern lower peninsula and the Upper Peninsula experienced a further decline from last year. Only the northern lower peninsula grew slightly, but the growth was primarily due to natural increase, not to in-migration as experienced during the 1970s. As a consequence, in a little over three years from 1980, net out-migration from the state as a whole is estimated to have climbed to 316,000 people. This out-migration exceeds the number recorded in the previous decade when net out-migration was nearly 300,000 people.

The economic recession in the past three years had a significant impact on population loss in 1983. Michigan has experienced double-digit unemployment rates since early 1980. The unemployment rate reached 17.1 percent in December 1982, the highest rate in recent years. Continuing high unemployment rates due to the economic recession have contributed to the acceleration in net out-migration in the state since 1980.

However, the population loss of 316,000 through out-migration between 1980 and 1983 does not mean a tremendous increase in the number of people moving out of the state. Based on federal income tax return data, the number of people moving out of the state was very stable during the second half of the 1970s (see Table 18 and Chart 2). Between 1975 and 1979, for example, 173,000 people moved out of Michigan every year. During the same period, the number of people moving into the state increased from 117,000 to 140,000 as Michigan's economy continued to improve from the 1974-75 recession.

After 1980, available IRS and driver's license data have shown that out-migration increased to 200,000 annually--a 14 percent increase, and in-migration decreased to 100,000--a 27 percent reduction. In other words, the recent population loss was due, mainly, to fewer people moving in than moving out.

Table 18

Migration of the Population in Michigan, 1975-1983

Year	In-migration	Out-migration	Net Migration
1975-76	117,090	172,455	- 55,365
1976-77	132,317	173,049	- 40,732
1978-79	140,902	174,023	- 33,121
1980-81	99,969	198,946	- 98,976
1982-83[1]	96,500	204,400	-107,900

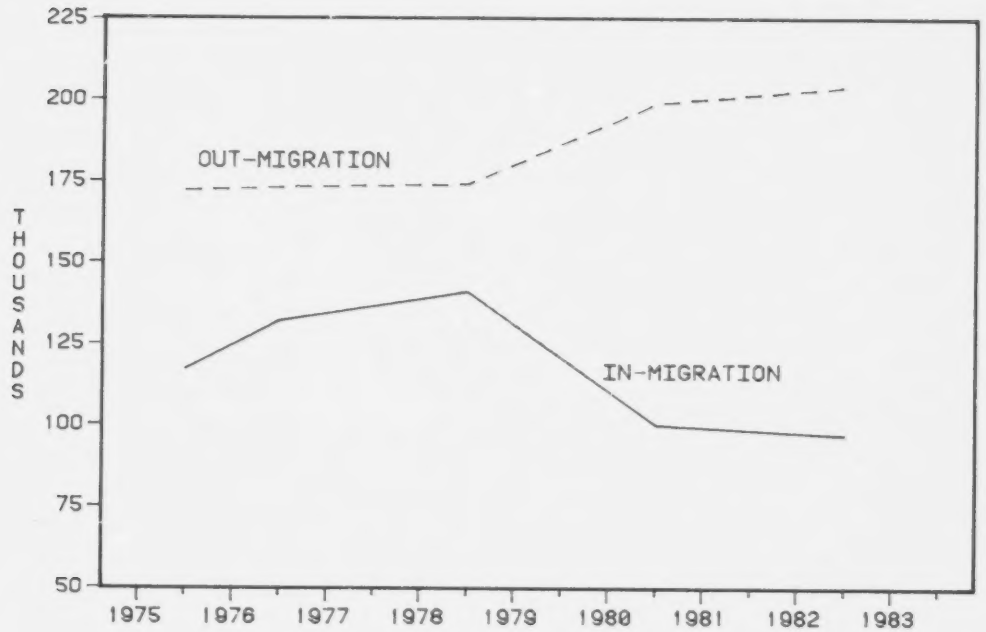
[1]IRS data are not available for 1982-83. Instead, driver's license data are used to derive migration figures. The year represents a period from April to March.

Source: Internal Revenue Service, "Area Migration Flow Data," and Michigan Department of State, special release.

Another factor affecting Michigan's population growth is the decline of births in recent years. The number of births in Michigan decreased from 147,000 births in 1980 to an estimate of 134,000 in 1983. In contrast, the entire United States continues to show a slight increase in births in the same period. As Chart 3 shows, between 1970 and 1980, female child-bearing age population 15-44 in Michigan increased by 17 percent due to the maturity of the baby-boom generation born in the 1950s, while the number of births decreased by 15 percent. In contrast, for the United States as a whole, female child-bearing age population 15-44 increased by 24 percent between 1970 and 1980, but the number of births decreased by three percent. The discrepancy between the rate of increase in the child-bearing age population in Michigan and the United States suggests a significant outmigration of young adults from Michigan. Thus, decline of the number of births in Michigan is, in part, affected by the out-migration in recent years.

Chart 2

In-migration and Out-migration in Michigan

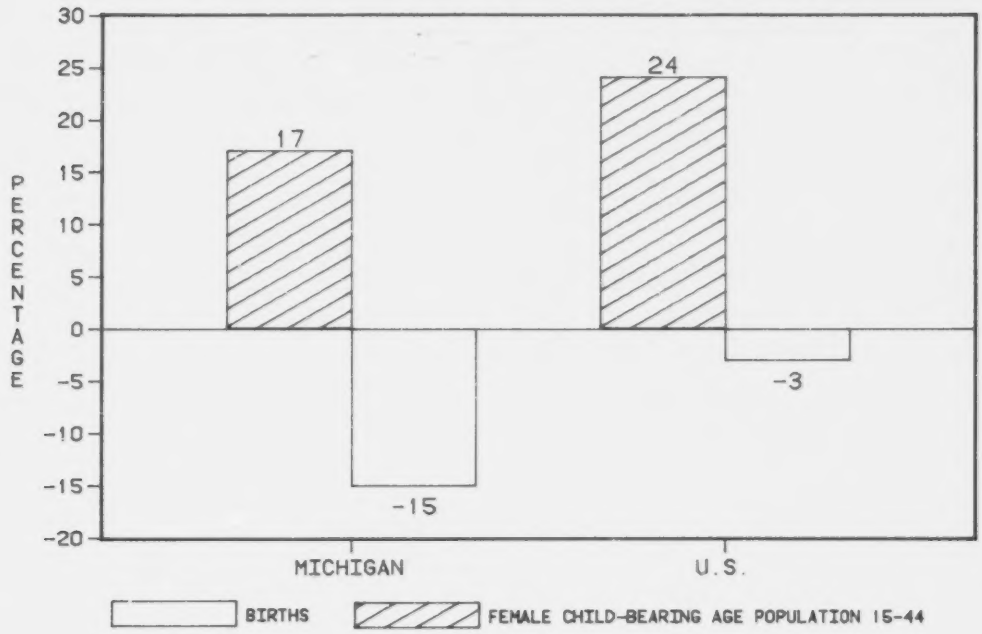


Metropolitan Areas

Population loss in metropolitan areas between 1980 and 1983 amounted to 1.46 percent as shown in Table 19. Metropolitan counties with a central city or cities lost 1.79 percent of the population, or .55 percent a year, which is higher than the average of 0.4 percent per year experienced during the 1970s. During that decade, a substantial number of people moved from Central Metropolitan areas to surrounding fringe areas and nonmetropolitan areas in Michigan. Between 1970 and 1980, every fringe metropolitan county, without exception, gained population through net in-migration. In contrast, between 1980 and 1983, all fringe counties experienced net out-migration, as in 1980 and 1982. In many counties the natural increase (births exceeding deaths) could not compensate for migration losses. Thus, fringe counties as a whole began to experience both out-migration and population decline after 1980.

Chart 3

Percent Change in Female Child-Bearing Age Population and Births in Michigan and The U.S., 1970-1980



Despite the overall decline and out-migration in metropolitan areas, three SMSAs (Ann Arbor, Grand Rapids, and Kalamazoo) gained population between 1980 and 1983. Kent County and Kalamazoo County continued to grow at a rate exceeding that experienced in the 1970s. However, the gain in these counties was due primarily to natural increase.

Nonmetropolitan Areas

The population in nonmetropolitan areas increased between 1980 and 1983, although there was a slight decline from 1982. The decline was primarily due to increasing out-migration from the southern lower peninsula and the Upper Peninsula. Some counties in the northern lower peninsula also began to lose population in 1983, while the entire area lost 1,500 through out-migration between 1982 and 1983. Consequently, in 1980-1983 net out-migration from nonmetropolitan areas reached 27,000. During the 1970s, nonmetropolitan areas had a net in-migration of 142,300.

Despite the net out-migration in nonmetropolitan areas as a whole, some individual counties in these areas continued to experience a substantial period of growth between 1980 and 1983. They include Alcona (2.4 percent), Antrim (2.9 percent), Arenac (3.2 percent), Cheboygan (2.6 percent), Clare (2.5 percent), Crawford (3.3 percent), Emmet (3.4 percent), Gladwin (5.8 percent), Grand Traverse (3.2 percent), Iosco (8.1 percent), Kalkaska (3.6 percent), Lake (10.6 percent), Montcalm (3.8 percent), Montmorency (5.3 percent), Newaygo (2.7 percent), Osceola (4.0 percent), Roscommon (8.5 percent), and Wexford (3.6 percent)--(see Appendix Table B-35). Nevertheless, the rate of population growth in these counties is significantly lower than in the 1970s.

Factors Affecting Recent Migration

The net loss of population through migration in Michigan is primarily due to a combination of two factors: the continuation of the general trend of movement from industrial states in the northeastern and the north central regions to the west and south, and the recent economic recession in Michigan. The double-digit rate of unemployment in Michigan since the early 1980s is the primary factor reducing the number of people moving into Michigan. At the same time, economic conditions also forced some people to leave Michigan.

In addition to high unemployment rates, high interest rates in the past three years also affected migration patterns among Michigan counties. High mortgage rates crippled the housing market, especially in 1982 when new-home mortgage rates jumped to 15.14 percent from an average of 10.78 percent in 1979. This development immobilized individuals who found they could not afford to buy a house. As a result, the population shift from central urban areas to suburban areas almost stopped. At the same time, unemployment caused suburban residents to seek jobs elsewhere. Thus, all fringe metropolitan counties experienced a net loss through out-migration in the past three years.

The unemployment rate in nonmetropolitan areas has always been higher than metropolitan areas (e.g., 10.3 percent vs. 7.2 percent in 1979). However, in nonmetropolitan areas unemployment increased up to 75 percent between 1979 and 1983, while metropolitan unemployment doubled.

Table 19

Michigan Regional Population Change, 1980-1983

Area	April 1, 1980	July 1, 1983	1980-83 Change Number	1980-83 Change Percent	1980-83 Net Migration[1] Number	1980-83 Net Migration[1] Percent
Michigan	9,262,078	9,155,480	-106,548	-1.15	-315,653	-3.41
Metropolitan Areas[2]	7,664,486	7,552,507	-111,979	-1.46	-288,360	-3.76
Central[3]	4,955,349	4,866,618	- 88,731	-1.79	-201,011	-4.06
Fringe[4]	2,709,137	2,685,889	- 23,248	- .86	- 87,349	-3.22
Nonmetropolitan Areas	1,597,592	1,602,973	5,381	.34	- 27,293	-1.71
Southern Lower[5]	781,122	716,486	- 4,636	- .59	- 22,925	-2.93
Northern Lower[5]	496,713	508,747	12,034	2.42	2,583	.52
Upper Peninsula	319,757	317,740	- 2,017	- .63	- 6,951	-2.17

[1]Net migration is the difference between net change and natural increase.

[2]Metropolitan areas are the counties in standard metropolitan statistical areas defined as of 1981.

[3]Central metropolitan counties are the counties which contain central cities (or cities) of standard metropolitan statistical areas.

[4]Fringe counties are the metropolitan counties which do not contain central metropolitan cities.

[5]The northern lower peninsula area includes the following counties: Arenac, Clare, Gladwin, Lake, Mason, Osceola, and the area north of these counties in the lower peninsula. The southern lower peninsula rarea includes nonmetropolitan counties located south of these counties.

Source: U.S. Bureau of the Census and the Michigan Department of Management and Budget.

The impact of the recession has been more severe in metropolitan areas than in nonmetropolitan areas. Statistical analysis of the relationship between unemployment and net out-migration in metropolitan areas suggests that the economic condition, as measured by local unemployment rates, is the primary factor contributing to population loss.

The majority of counties experiencing population growth and net in-migration were those which had a lower proportion of occupied housing and a lower housing value. For example, Lake County, which experienced 10 percent growth between 1980 and 1983, had occupancy rates of 40 percent for year-round housing units and only 29 percent for total housing units, which includes seasonal housing in 1980. The value of owner-occupied housing was only $19,800--substantially lower than the average of $32,500 in the northern lower peninsula. Another example is Roscommon County which had 9 percent growth with 50 percent of year-round housing units occupied and only 36 percent of total housing units occupied. The owner-occupied housing value was $29,200, also lower than the regional average. It is likely that people will buy less expensive housing when they find they cannot afford to move into more expensive housing with current high mortgage rates. It is also possible that unemployed workers and retired workers with second homes in these areas may convert them into permanent residences. The 1980 census indicated that the percentage of housing units occupied in the northern lower peninsula, where the most population growth occurred, was lower than any other region in Michigan.

1984 Outlook

The decrease in Michigan's population in 1983 reflects the serious economic recession of the past three years. However, the decline does not reflect a significant increase in the number of people moving out of the state; rather, it is the result of a large reduction in the number of people moving in and some increase in the number of people moving out. It seems that in-migration is more sensitive to economic conditions in Michigan than out-migration. Out-migration is probably related more to the national, long-run shifting of population from the northeast and north central regions to the west and south. Therefore, the amount of outflow is very stable over time. The inflow of migrants tends to fluctuate depending on Michigan's economy. Thus, with an economic recovery as is now underway--with a declining unemployment rate, greater consumer confidence

in buying, and strong automobile sales--more people are expected to move into Michigan. If interest rates for home loans continue to be as high as in the past three years, mobility of the population from central urban areas to suburban areas will remain low. Migration in nonmetropolitan areas between 1980 and 1983 was mainly related to the availability of housing. Economic conditions contributed minimally to the general pattern of population growth. Because high interest rates have been a major factor affecting the expansion of the housing market and the development of new residential areas, population growth in nonmetropolitan areas will remain slow in the near future.

MICHIGAN SECTOR ANALYSIS

- Motor Vehicle Industry
- Energy
- Finance
- Construction
- Agriculture
- Mineral Supplies and Mining
- Transportation
- Tourism
- International Trade

MOTOR VEHICLE INDUSTRY

1983 Developments

The resurgence in the motor vehicle industry clearly reflects the strength of the robust recovery that the economy experienced in 1983. Total U.S. motor vehicle sales rose 15.7 percent in 1983 after declining in each of the previous four years. This rise in sales, coupled with drastic cost-cutting measures initiated by motor vehicle manufacturers during the recession, boosted profits of the "Big Three" manufacturers from $236 million in 1982 to $6.3 billion in 1983. In addition, 1983 marked a reversal in the trend of rising import penetration into the U.S. new car market, as the import share fell to 26 percent in 1983 from 27.8 percent in 1982.

While activity in the motor vehicle industry did improve significantly during 1983, the level of sales and production was still well below the peak level reached just prior to the 1979-80 recession. For example, automobile sales in 1983 were 18.8 percent below the 1978 level, while truck sales were 20 percent below the 1978 peak. Nevertheless, activity did improve significantly in 1983 and the outlook for 1984 is for continued improvement.

Automobile Sales

After declining for four consecutive years--from 11 million units in 1978 to 8 million units in 1982, a decline of 28 percent--total U.S. auto sales rose 15.3 percent to 9.2 million units in 1983 (see Table 20). Chart 4 illustrates the 1983 rebound in U.S. auto sales. Even more significant, domestically-built autos accounted for most of the increase in total auto sales. In 1983, sales of domestically built autos increased to 6.8 million units from 5.8 million units in 1982, an increase of 18.1 percent. As with total auto sales, this represented the first yearly increase in domestic sales since 1978.

Imported autos also benefited from the economic recovery as sales climbed to 2.4 million units in 1983 from 2.2 million units in 1982. This was, however, an increase of only 7.2 percent--less than half the rate of increase experienced by domestic producers. As a result, imported autos' share of the

Table 20

U.S. Motor Vehicle Sales, 1979-1984
(Millions of Units)

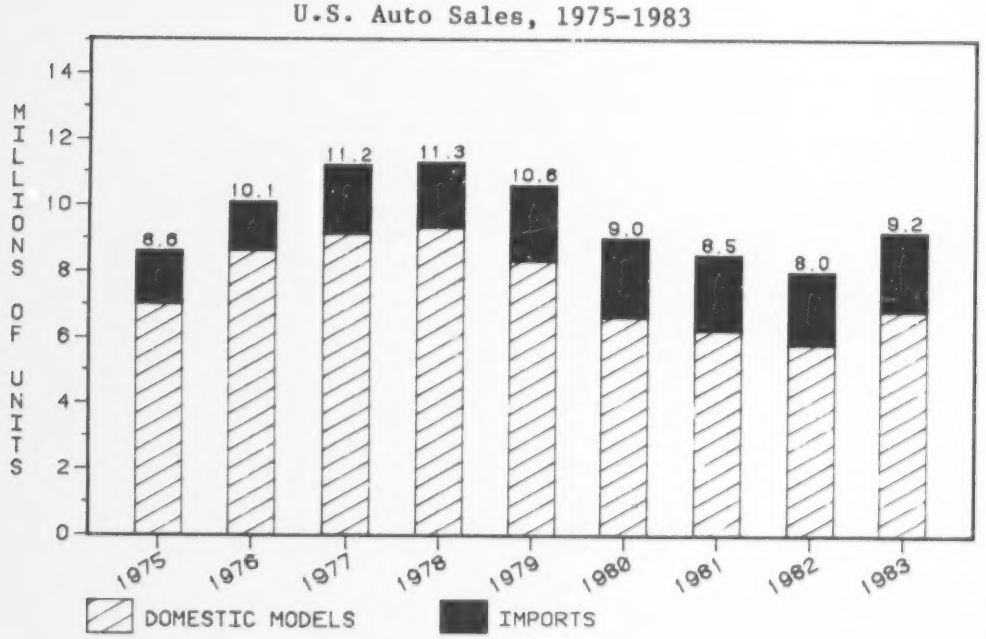
Vehicle	1979	1980	1981	1982	1983	1984 Forecast
Passenger Cars						
Total	10.6	9.0	8.5	8.0	9.2	10.5
Domestic	8.3	6.6	6.2	5.8	6.8	7.9
Imports	2.3	2.4	2.3	2.2	2.4	2.6
Trucks						
Total	3.5	2.2	2.3	2.6	3.1	3.6
Domestic	3.0	1.8	1.8	2.2	2.7	3.1
Imports	0.5	0.4	0.5	0.4	0.4	0.5

[1]Estimated by the Michigan Department of Management and Budget.

Source: Automotive News, Crain Automotive Group, Inc., selected issues.

Chart 4

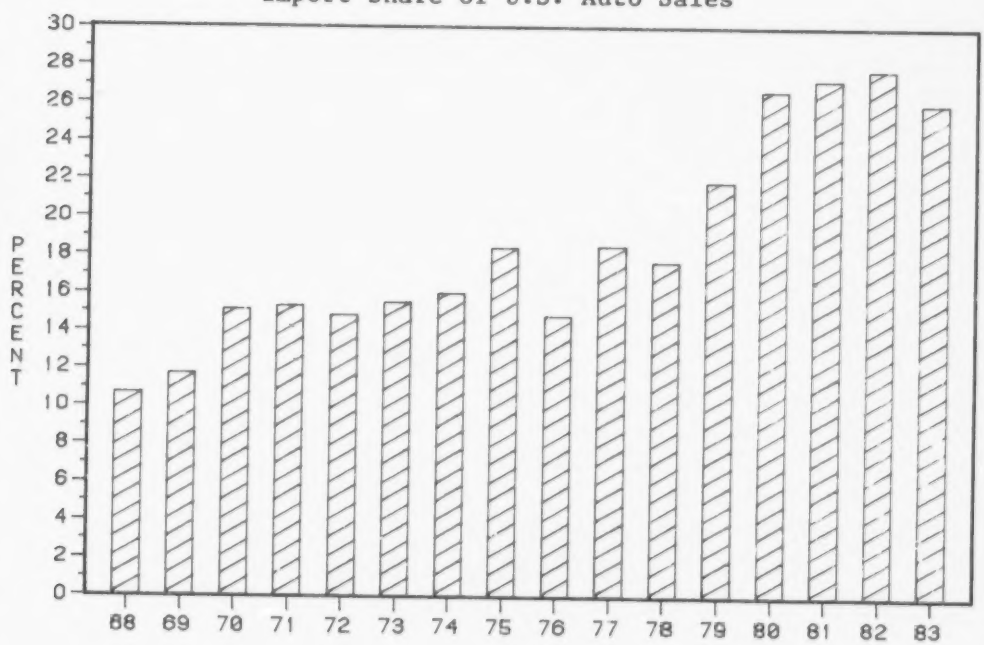
U.S. Auto Sales, 1975-1983



total U.S. new car market shrank from 27.8 percent in 1982 to 25.9 percent in 1983 (see Chart 5). This was the first drop in the import share since 1978.

Chart 5

Import Share of U.S. Auto Sales



While domestic autos may be becoming more competitive with imports in terms of overall quality, fuel efficiency, design, and pricing, the major reason for the decline in the 1983 import share of the U.S. new car market was the import quota on Japanese-built automobiles. In 1981, the Japanese government "voluntarily" agreed to limit imports into the U.S. to 1.68 million vehicles annually, through March 1984. This agreement was motivated by the fear that, in light of the adverse effect the recession was having on the sales of U.S. produced autos, the U.S. government would impose even tighter mandatory restrictions on Japanese imports. In 1981 and 1982, the import quota was not binding because the Japanese producers sold less than 1.68 million cars in the depressed U.S. new car market.

However, as economic conditions began to improve in 1983, the demand for Japanese autos rose and the import quota became a restrictive force. By the end of 1983, the U.S. inventory of Japanese-built autos was extremely low. A 40-day supply of imported autos is viewed as a reasonable and desirable inventory level, but the inventory of many Japanese autos was less than 20 days and, therefore, restricted sales.

Truck Sales

Retail sales of new trucks rose 19.2 percent to 3.1 million units in 1983. This was the largest gain since 1976 when truck sales climbed 27.8 percent. Similar to the pattern in auto sales, the 1983 increase in truck sales was largely due to a significant increase in the sales of domestically-built trucks, which rose 23 percent to 2.65 million units.

This increase can be attributed to two major factors--the volatile nature of truck sales and the popularity of the new downsized pickup trucks. Truck sales tend to be more cyclical than car sales because trucks are more often secondary vehicles whose purchase is more easily postponed during a recession. The other important factor contributing to the rise in truck sales in 1983, as well as 1982, was the introduction of the new, downsized pickup trucks. These trucks have vastly improved fuel mileage compared to the standard-size pickups, yet still offer reasonable hauling capacity.

U.S. Motor Vehicle Production

As a result of the increase in motor vehicle sales during 1983, U.S. motor vehicle production increased from 7 million units in 1982 to 9.3 million units in 1983, an increase of 32.9 percent (see Table 21).

Leading this increase was automobile production. In 1983, the total number of new cars assembled in the U.S. rose 34.6 percent to 6.9 million units. This much faster growth in auto production, compared to the 18.1 percent increase in domestic auto sales, was the result of manufacturers replenishing their inventories. In an attempt to minimize losses during the recession, the auto companies had kept their inventories of new cars as low as possible. As automobile sales began to increase in 1983, inventories were increased to assure that an adequate level of new automobiles was available to meet the rising demand.

Truck production rose to 2.4 million units in 1984, an 18.5 percent improvement from the 1.9 million trucks assembled in the United States in 1982. This marks the first time in four years that truck production has topped the two-million-unit level.

Michigan Motor Vehicle Production

During 1983, motor vehicle production in Michigan increased to 2.84 million units from 2.36 million units in 1982, an increase of 20.3 percent (see Table 21). Production in Michigan did not increase as fast as the 33 percent gain nationally because production in Michigan had not fallen off as severely as national production during the recession. In 1981,

Table 21

U.S. and Michigan Motor Vehicle Production, 1979-1984
(Millions of Units)

Vehicle	1979	1980	1981	1982	1983	1984 Forecast
Passenger Cars						
U.S.	8.43	6.38	6.27	5.11	6.88	7.90
Michigan	2.53	1.73	2.05	1.78	2.16	2.33
Percent of U.S.	30.0	27.1	32.7	34.8	31.4	29.5
Trucks						
U.S.	3.05	1.63	1.64	1.90	2.42	3.20
Michigan	1.00	0.43	0.46	0.58	0.68	0.88
Percent of U.S.	32.8	26.4	28.0	30.5	28.1	27.6
Total Motor Vehicles						
U.S.	11.48	8.01	7.91	7.01	9.30	11.10
Michigan	3.53	2.16	2.51	2.36	2.84	3.21
Percent of U.S.	30.7	27.0	31.6	33.7	31.1	29.0

[1]Estimated by the Michigan Department of Management and Budget.

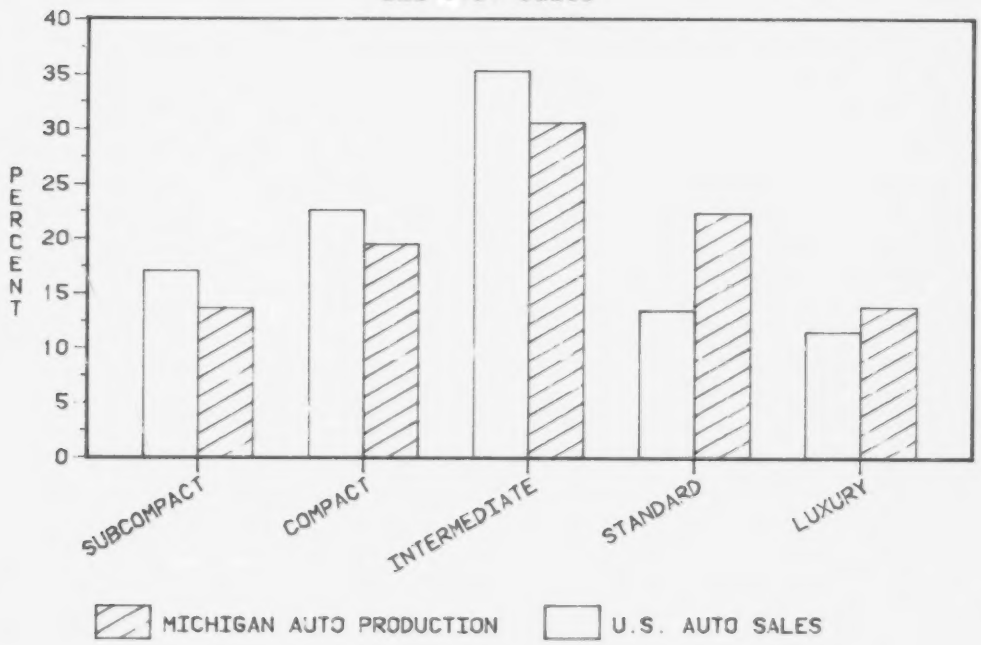
Source: Automotive News, Crain Automotive Group, Inc., selected issues.

Michigan's motor vehicle production rose 16.2 percent compared to a decline nationally of 0.9 percent, and in 1982 total U.S. production fell 10.8 percent compared to a decline of 6 percent in Michigan. As demand for new vehicles increased in 1983, plants that were shut down were reopened, and laid-off shifts were reinstated. Because relatively more of the plant shut-downs and shift layoffs occurred outside of Michigan, production rose faster outside of Michigan during the 1983 recovery. As a result, Michigan's share of total U.S. motor vehicle production, which increased from 27 percent in 1980 to 31.6 percent in 1981 and to 33.7 percent in 1982, fell to 30.5 percent in 1983.

Passenger cars comprise approximately 70 percent of total motor vehicle production in Michigan, compared to 75 percent nationally. In terms of the mix of autos produced, Michigan tends to produce more of the larger-sized cars. Chart 6 compares the 1983 mix of domestic nameplate cars purchased in the U.S. to the mix of autos produced in Michigan. Subcompact-, compact- and intermediate-sized autos represent a smaller share of Michigan's production than they do of total

Chart 6

Automobile Product Mix--1983 Michigan Production and U.S. Sales



domestic auto sales. Conversely, standard-size cars accounted for 22.4 percent of Michigan's production in 1983, but only 14 percent of total domestic sales. However, Michigan's production mix is currently better balanced than it was in 1980 when no subcompacts were produced in Michigan and this should make production less volatile in the future.

1984 Outlook

The major economic variables determining the strength of motor vehicle sales are expected to improve favorably during 1984. These key variables are real disposable income, new car prices, the degree of import penetration, and interest rates. Before consumers can seriously consider purchasing a car or truck, they must have the financial resources to make a down payment and to afford the monthly payments. During the recession, unemployment and uncertainty about future finances forced many individuals to postpone the purchase of a new vehicle. In 1983, increases in employment and hours worked and a low rate of inflation combined to boost real income and motor vehicle sales. In 1984, employment is expected to continue to increase and inflation is forecast to rise only moderately. The resulting increase in real income will have a positive impact on motor vehicle sales.

Moderate increases in new car prices and continuing import restrictions should help bolster domestic auto production and sales in 1984. The prices of the 1984 models are up an average of only 2 to 3 percent compared to vehicle prices at the end of the 1983 model year. This modest price increase of $200 to $300 for the average car is not expected to inhibit sales. In addition, the extension of the Japanese import quota at 1.85 million units--an increase of 10 percent over the previous quota--from April 1984 to March 1985, will hold imports below the free-market level and should also have a positive short-run impact on domestic auto sales.

The 1984 sales and production forecasts are based on the assumption that there will not be an auto strike this fall. The United Automobile Workers' contracts with both Ford and General Motors expire in September. A prolonged strike could depress production in 1984, although much of the lost production would probably be made up in 1985.

The second dark cloud on the 1984 economic horizon that could negatively affect motor vehicle sales and production is rising interest rates. In 1983 short-term market interest

rates fell 200 to 300 basis points below 1982 levels. This drop helped lower new car financing rates. However, in February and March 1984, interest rates began edging up again. The big question is: What will interest rates do during the remainder of 1984? Inflation remains low, but has been edging up in recent months. Higher inflation, plus increased competition for loanable funds between the federal government, consumers, and businesses, could force interest rates upward. It appears that the most likely scenario is for interest rates to edge upward through the end of 1984, but not by enough to thwart economic growth or undercut motor vehicle sales in 1984. However, higher interest rates could pose a more serious problem in 1985.

Based on the forecasts of these important economic variables, U.S. auto sales are expected to rise 14.1 percent to 10.5 million units in 1984. The import restriction on Japanese automobiles will result in a decline in the import share of the U.S. new car market to 25 percent from 26 percent in 1983. Domestic auto sales are forecast to rise 16.2 percent to 7.9 million units.

These sales increases are expected to boost U.S. motor vehicle production 19.4 percent to 11.1 million units. In Michigan, motor vehicle production is forecast to rise 13 percent to 3.21 million units, but Michigan's share of total production is expected to dip to 29 percent from 31 percent in 1983. This decline in Michigan's share is expected because plants in Michigan are currently operating closer to capacity than plants in other states. Therefore, the increase in the motor vehicle production forecast in 1984 will occur disproportionately in other states.

ENERGY

1983 Developments

Michigan energy supplies remained sufficient to meet demand in 1983. Key developments during 1983 included a continuing world-wide surplus of crude oil, stable petroleum product prices, increases in natural gas prices, a reduction in Michigan energy dependence, and significant increases in the sale of gasohol.

Michigan's energy dependence has declined slightly in recent years due to increased oil and gas production and reduced energy use. Michigan imported from other states and nations about 87 percent of its energy needs in 1983 costing $8 billion wholesale. During 1983, Michigan crude oil production totaled 32.2 million barrels, and natural gas production totaled 136 billion cubic feet. Michigan businesses and residents spent an estimated $15.4 billion at retail prices for energy in 1983.

State government has implemented a number of programs to reduce the transfer of money from Michigan's economy to energy-exporting states and nations. These programs result in energy conservation actions which will reduce energy use year after year. Grants totaling $8.5 million were awarded to weatherize schools and hospitals in 1983, and an additional 18,500 homes for low-income families were weatherized through a Michigan Department of Labor program.

Over 165,000 additional homes received energy audits through the Residential Conservation Service program in 1983. These audits could result in actions which will save Michigan homeowners over $7 million annually. State tax credits for renewable and solar energy systems installed in 1982 totaled $1.5 million in 1983; the total investment by Michigan residents of over $13 million in these systems is likely to result in energy savings of over $1.2 million annually. A motor fuel tax exemption provided about $20 million to encourage the production and use of gasohol.

In 1983, the Legislature enacted statutes to modify and extend solar and renewable energy tax credits, to allow wholesalers credit for prepayment of sales tax on gasoline, to extend the residential energy conservation loan program, and to extend indefinitely the Governor's authority to respond to

energy emergencies. Also, the gasoline tax was increased January 1 to 15 cents per gallon according to the formula adopted under 1982 legislation. To ensure the availability of heat to low-income residents at minimum cost to taxpayers, a comprehensive set of 1983 proposals called the Energy Assurance Package was enacted into law in the first part of 1984. This "package" was designed to accelerate weatherization and related repairs of low-income, energy-inefficient residences, to provide heating utility shut-off protection, and to extend and modify the home-heating tax credit.

Coal

Coal provides just over a quarter of Michigan's energy supply. In 1983, the state used an estimated 29 million tons of bituminous coal. Public utilities burned about 75 percent of this coal to generate electricity, and industry used about 24 percent, primarily to produce coke used in making steel. Residential and commercial use of coal was less than one percent.

The price of coal during the first nine months of 1983 averaged $45 per ton for Michigan utilities and $51 for industrial users, excluding coke plants. This is a decrease in the cost of coal from last year when the average price per ton was $46 for utilities and $55 for industrial users in Michigan.

Crude Oil

Energy conservation and the weak world economy kept the price of crude oil depressed in 1983. In January 1983 world crude prices averaged $33 per barrel. The average price of crude oil dropped to $28.55 by May and stayed there the rest of the year.

Decline in the demand for oil, worldwide, has been caused by the weak worldwide economic recovery, increased energy conservation and a reduction in world oil stocks. Members of OPEC lowered their official price for oil to $29 from $34 per barrel in March 1983--the first lowering of OPEC's official price in its 23-year history. OPEC also continued a collective production ceiling of 17.5 million barrels per day for member countries.

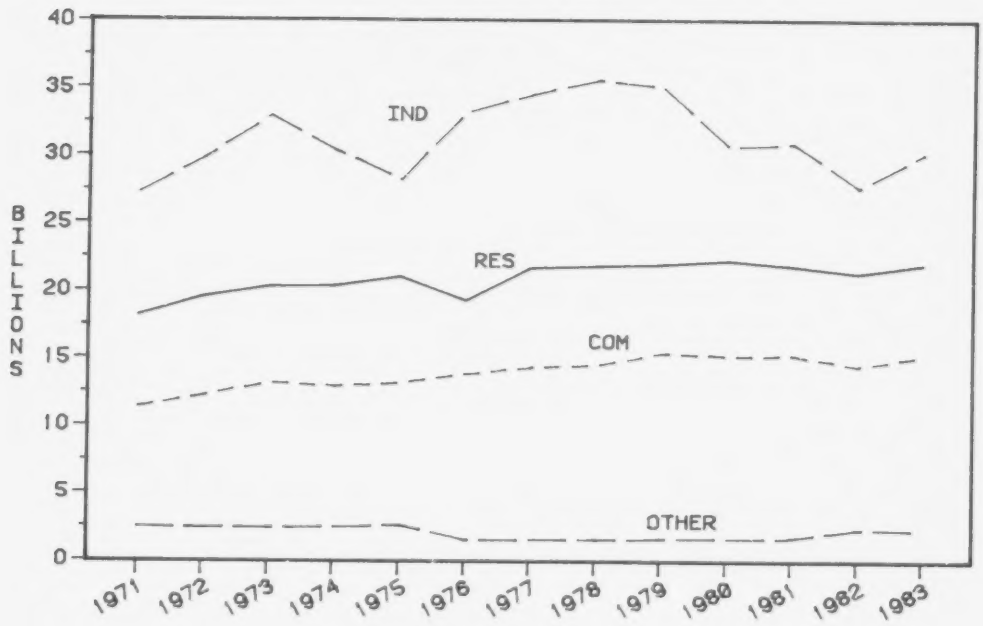
Electricity

Electric sales rose in 1983 for all major classes of users including residential, commercial and industrial. Revenues rose 7.6 percent, reflecting both increased usage and, to a lesser extent, rates.

The use of electricity rose mainly because of the economic recovery, as can be seen from the rise in industrial demand (see Chart 7). However, the warmer than average summer also contributed to higher demand. Because the recovery was in its early stages, there was little growth in the number of customers.

Chart 7

Michigan Electric Sales
(Billions of Kwh)



It is estimated that the average cost per kilowatt-hour for all types of consumers rose 1.9 percent from 6.14 cents/kwh in 1982 to 6.23 cents/kwh in 1983. This largely reflected capital costs as fuel costs were nearly constant during the

period. From January 1983 to February 1984, the kilowatt-hour cost increase for a 500 kilowatt-hour residential customer represented an increase of about one percent.

Table 22

Regulated Public Utility Revenues, 1982 and 1983[1]
(Thousands)

Revenues	1982	1983 (Estimate)	Percent Change
Electric			
Commercial Sales	$ 870,459	$ 934,396	7.4
Industrial Sales	1,259,737	1,355,036	7.6
Residential Sales	1,155,555	1,250,294	8.2
Other (including resale)	185,782	196,069	5.5
Total	$3,471,533	$3,735,795	7.6
Gas			
Commercial Sales	$ 701,010	$ 835,568	19.2
Industrial Sales	748,081	790,043	5.6
Residential Sales	1,595,922	1,852,333	16.1
Other (including resale less refunds)	3,452	136,102	3,842.8
Total	$3,048,465	$3,614,046	18.6

[1]Figures based on Michigan's largest electric providers (Consumers' Power & Detroit Edison) and largest gas service providers (Michigan Consolidated Gas & Consumers' Power), which supply over 90 percent of Michigan's electric and gas service.

Source: Michigan Department of Commerce, Public Service Commission.

Distillate Fuel Oil

Fuel oil consumption, including kerosene, Number 1 and Number 2 fuel oil, and diesel fuel, increased 21 percent to an estimated 901 million gallons in 1983. Part of the increase

was due to improvements in the economy which increased industrial and trucking use. During the first half of 1983, diesel fuel use averaged 21 million gallons a month. This average increased to 25 million in the last half of 1983. The demand for fuel oil depends heavily on the level of economic activity since industrial and transportation uses account for about 54 percent of distillate fuel oil consumed.

Table 23

Energy Sales and Customers in Michigan, 1982 and 1983[1]
(Millions)

Source	1982	1983 (Estimate)	Percent Change
Electric Companies			
Electric Power Sales (kwh)	56,673	60,009	5.9
Generating Capacity (kil.)	14.6	14.6	---
Net Plant Investment	$ 12,219	$ 13,268	8.6
Customers (thousands)	3,105	3,114	0.3
Gas Companies			
Gas Energy Sales (cu. ft.)	692,477	651,981	- 5.8
Estimated Reserves (cu. ft.)	5,500,000	3,700,000	-32.7
Net Plant Investment	$ 2,308	$ 2,343	1.5
Customers (thousands)	2,431	2,442	0.5

[1]Figures based on Michigan's largest electric providers (Consumers' Power & Detroit Edison) and largest gas service providers (Michigan Consolidated Gas & Consumers' Power), which supply over 90 percent of Michigan's electric and gas service.

Source: Michigan Department of Commerce, Public Service Commission.

The level of industrial, residential and commercial use depends on the average temperature during the winter. In January 1983, Number 2 home-heating oil, excluding the sales tax, cost $1.17 per gallon. Prices declined to $1.08 per gallon by December 1983 due, mainly, to a reduction in world oil prices.

Natural Gas

Natural gas consumption fell approximately 5.8 percent in Michigan in 1983 despite the economic recovery. Continued price increases made the fuel less competitive and encouraged fuel switching and conservation, especially by industry. Recent price increases for natural gas have been substantial, especially in the year prior to the 1983-84 heating season. Natural gas prices for 150 million cubic feet to a residential customer rose 31 percent for Consumers' Power and 23 percent, starting from a higher base, for Michigan Consolidated Gas between the winter of 1982-83 and the winter of 1983-84.

Gasoline

For the fifth consecutive year, gasoline use declined in Michigan. Gasoline consumption peaked in 1978 at five billion gallons and fell to 3.8 billion gallons in 1982 and to 3.7 billion gallons in 1983. (These figures include both taxed and untaxed gallons.) The reasons for this decline include a reduction in vehicle miles traveled and improvements in the average fuel efficiency of automobiles. Michigan's vehicle fleet averaged 15.5 miles per gallon in 1980 and 16.7 miles per gallon in 1983.

Gasoline prices dropped during the first part of 1983. Between January and March the average state-wide price of gasoline declined by seven cents per gallon. This decline was offset by the increase in price due to the additional federal tax of five cents per gallon beginning April 1, 1983. The average price of unleaded gasoline at full-service stations began the year at $1.40 per gallon and fell to $1.34 by March. At the end of the year, however, the price was back to $1.42.

Gasohol sales in 1983 were 566 million gallons, compared to 206 million gallons in 1982. Gasohol accounted for 15 percent of total gasoline sales in Michigan in 1983.

1984 Outlook

The U.S. Department of Energy estimates that total U.S. energy consumption will increase 4.5 percent in 1984. This projection assumes continued economic growth, a 5.3 percent increase in real gross national product and stable world oil prices. To meet this increased energy demand, U.S. oil imports

are expected to increase from 28 percent of domestic demand in 1983 to about 33 percent in 1984. Although this is a slightly stronger national economic forecast than used in this report, Michigan energy consumption is estimated to rise also.

Coal supplies for both steel production and electric utility power are projected to be adequate in 1984. The United Mine Workers' contract expires September 30 and this could create some shortages if a strike occurs. The improving economy and strike-hedge purchasing could raise costs of newly purchased coal to utilities as much as 8.8 percent above last year. However, large increases are unlikely because of adequate supply and weak export demand.

The worldwide outlook for petroleum is that supplies will be adequate with prices rising very slightly toward year end. This assumes no major supply disruption from the Iraq-Iran War and that OPEC will be able to maintain its price in the international oil market. Disruption of Persian Gulf oil supplies would cause a shortage and rapid increases in price. If the world and U.S. economies grow more slowly than expected, OPEC might have to move to an even lower $25 per barrel market price. Either event would quickly and directly affect the price of petroleum and petroleum products in Michigan.

Although refiners' acquisition costs are expected to remain constant in 1984, gasoline prices are expected to rise by a few cents during the year. The increase comes from higher refiner and distributor margins as strong demand allows some price increases. Demand for gasoline will continue to increase in 1984 because of the improved economy and smaller gains in fuel efficiency.

Demand for electricity will increase slightly--one to 2 percent--in 1984 because of the increase in economic activity. Generating capacity is adequate to meet this increase. Detroit Edison is planning to bring the coal-fired Belle River Unit No. 1 on line this year and is also building the Enrico Fermi Unit No. 2. Consumers' Power Company halted work on both units of the Midland Nuclear Plant after being unable to gain support from business and consumer groups for further financing. The magnitude of the effect of the halt on 1984 rate increases is uncertain at this time.

Both major utilities have rate increases pending with interim action likely in the second quarter and final action in 1985. Fuel costs for electric generation will not be a major cause of electric rate increases in 1984.

Natural gas supplies appear adequate and demand is expected to decline by a small amount. As a result of rapid price increases during early 1983 the annual average cost of natural gas in 1984 will be well above 1983 levels. However, natural gas prices are expected to be essentially flat during 1984 because of adequate short-term supplies and the resulting contract negotiations. Under these conditions some customers will face small price increases while others will face small decreases, depending upon the company supplying natural gas.

FINANCE

1983 Developments

After several years in the spotlight monetary policy became less visible in 1983 as fluctuations in financial markets moderated significantly, inflation abated and the economy surged forward. The major monetary event of the year was the reappointment of Paul Volcker to another term as chairman of the Federal Reserve Board. Except for concern in the first half of the year that the money supply was increasing too fast, stable interest rates and the expanding economy shifted the major economic focus away from monetary policy. The major economic concerns in 1983 were the size of the federal budget deficit, fears that the recovery was too fast and the negative impact of the strong U.S. dollar on the balance of trade.

Monetary Policy Accomodates Economic Recovery

The Federal Reserve Board's reaction to the serious recession in 1982 was to substantially ease monetary policy and drive interest rates down sharply. The money supply (M1) increased 13.6 percent from July 1982 to July 1983, well above the relatively high 1983 money growth target of 4 to 8 percent set in February 1983 (see Table 24). All of this growth, however, is not attributable to a deliberate easing by the Fed. A portion is due to institutional changes which led to increased availability of interest-bearing transaction accounts which are included in M1.

The drop in interest rates occurred in the last half of 1982 and rates were relatively stable in 1983. The discount rate was reduced several times in 1982, falling from 12 percent in July to 8.5 percent in December, where it remained through 1983. The federal funds rate, a good indication of the Fed's posture, fell from almost 15 percent in July 1982 to below 9 percent by the end of the year; the 1983 range was 8.5 to 10 percent.

The rapid growth in the money supply from mid-1982 to mid-1983 caused concern among many economic observers, particularly against the background of an accelerating economic recovery. The major underlying concern was that inflation would be reignited by too rapid an economic expansion combined

with huge actual and potential federal budget deficits. The Fed shared these concerns and at the May meeting of the Federal Open Market Committee the decision was made to increase slightly the degree of reserve restraint. The committee stated its policy objectives as "seeking to foster monetary and financial conditions that will help reduce inflation further, promote a resumption of growth in output on a sustainable basis, and contribute to a sustainable pattern of international transactions." (Federal Reserve Bulletin, August 1983, p. 630.)

Table 24

U.S. Money Stock, 1982 and 1983
(Quarterly Percent Change at Annual Rates, Seasonally Adjusted)

Year	M1[1]	M2[2]	Monetary Base[3]
1982			
I	10.7	9.9	8.7
II	2.2	7.5	8.3
III	6.3	9.7	7.0
IV	16.3	11.0	8.7
Average	8.9	9.5	8.2
1983			
I	13.4	22.1	11.8
II	12.1	11.0	11.2
III	9.8	7.1	7.4
IV	4.9	8.7	7.9
Average	10.1	12.2	9.6

[1]Includes currency and commercial bank demand deposits held by the nonbank public and other checkable deposits of all depository institutions, plus traveler's checks.

[2]M1 plus money-market fund deposits, savings and small time deposits, overnight repurchase agreements and Eurodollars.

[3]Adjusted monetary base includes reserve accounts at Federal Reserve banks and currency in circulation.

Source: Monetary Trends, Federal Reserve Bank of St. Louis, March 1984.

The Fed's increased restraint was evident in a moderate upturn in interest rates beginning in May (see discussion below) and a slowing in the annual rate of growth in M1 to 4.9 percent from July 1983 to December 1983. The growth in M1 in the second half of 1983 was well within the 5 to 9 percent target range established by the Fed in mid-1983.

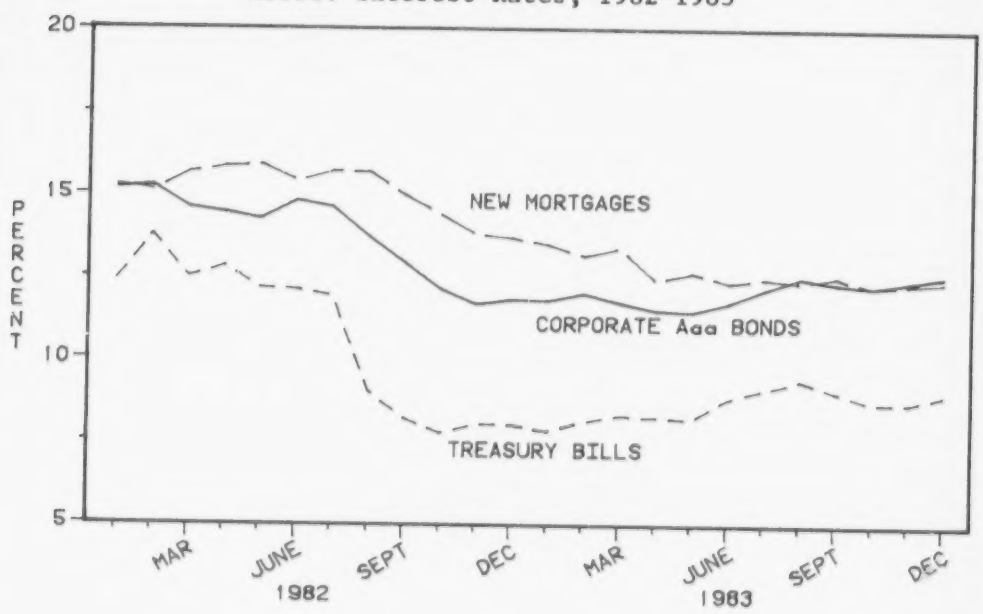
Interest Rates Stabilized in 1983

Short-term interest rates were more stable in 1983 than in any year since 1976, and long-term rates were more stable than in any year since 1977.

As illustrated in Chart 8, three-month Treasury bill rates varied little in the first five months of 1983. In June, rates jumped sharply because of fear that rapid growth in the money supply and the strong economic recovery would reignite inflation. Equally important was a modest tightening of credit by the Fed. This runup continued until August with T-bill rates peaking near 9.5 percent. Rates declined modestly in September and October and then turned up in the last two months of the year, ending just below 9 percent for December.

Chart 8

Market Interest Rates, 1982-1983



Triple-A corporate bond rates (long term) were also stable in the first half of 1983. Then from May to August rates increased about one percentage point for the same reasons short-term rates increased, as explained above. From September until the end of the year there was little change in corporate bond rates or other long-term rates. Mortgage rates declined steadily throughout the year, except for a few brief interruptions. The rate decline was about 1.5 percentage points, from 13.5 percent in May to 12.4 percent in December.

Although nominal interest rates have declined sharply from the 1981 peaks, there is some debate about the level and direction of change of real interest rates. According to economic theory, real interest rates should be determined by subtracting the expected rate of inflation from nominal interest rates. The problem is the actual measurement of the unobservable expected rate of inflation. Expectations can be measured by using past inflation rates or projections of future inflation rates. If a measure based on past inflation is used as an adjustment, real after-tax rates (on Aaa municipal bonds) in late 1983 were about triple the historical average of 2 percent and substantially higher than in 1981 or 1982. However, if a measure based on future inflation is used, real rates were slightly below 4 percent in late 1983, well below the 1982 peak of more than 7 percent. Regardless of the measure chosen, real interest rates are at historically high levels and may begin to have an adverse impact on interest-sensitive sectors of the economy in 1984.

Savings Flows to Financial Institutions Accelerated in 1983

Although the U.S. saving rate declined, savings and time deposits at U.S. financial institutions increased 13.7 percent in 1983 compared with a 7.8 percent increase in 1982 (see Table 25). This higher growth rate was due to increased disposable income and the introduction of money market deposit accounts (MMDAs) in December 1982, which drew funds from money market mutual funds. The MMDAs attracted over $34 billion in funds by April 1983 and the money market funds lost almost $50 billion between November and April. The introductory rate on the MMDAs made this type of account not only more attractive than money market mutual funds and other deposit accounts, but also more attractive than virtually all short-term market instruments. The average yields on MMDAs in December exceeded the average rate on money market mutual funds by 2.5 to 3 percentage points. However, by March these yields had fallen below yields

Table 25

U.S. Financial Deposits, 1982 and 1983
(End of Quarter Averages in Billions of Dollars, Seasonally Adjusted)

	Savings Deposits	Small Denomination Time Deposits	Large Denomination Time Deposits	Money Market Deposit Accounts	Money Market Mutual Fund Shares
Dec. 1981	345.7	827.3	301.6	——	186.8
Mar. 1982	346.6	840.7	315.8	——	194.5
June 1982	347.2	859.3	327.4	——	206.7
Sept. 1982	350.0	883.2	336.1	——	233.3
Dec. 1982	362.1	856.9	327.9	43.0	233.6
Mar. 1983	322.2	733.2	295.4	321.0	198.8
June 1983	322.8	724.8	303.0	368.6	179.7
Sept. 1983	317.9	759.0	313.2	369.5	176.7
Dec. 1983	312.9	793.1	325.8	376.0	178.5
1982 Growth Rate (%)	4.7	3.6	8.7	——	25.1
1983 Growth Rate (%)	-13.6	- 7.4	- 0.6	-17.1[1]	-23.6

[1]Growth rate from March to December 1983.

Source: Economic Indicators, Council of Economic Advisors, selected issues.

below yields on most short-term market instruments, but remained higher than yields on money market funds. As indicated in Table 25 the explosive growth in MMDAs slowed sharply after April, as did the outflow of funds from money market funds.

Another new market instrument introduced in January 1983 was the "Super NOW" account. These accounts are similar to the MMDAs but were overshadowed by the MMDAs because they were promoted less heavily, priced less attractively, and were not available to business depositors. At the end of 1983 Super Now accounts had attracted deposits of only $37.3 billion compared with $372.2 billion for MMDAs.

Savings deposits at Michigan financial institutions also increased in 1983. As shown in Table 26, total Michigan time and savings deposits increased a strong 18.3 percent in 1983, following a moderate 4.3 percent increase in 1982. Deposits at savings and loan associations grew $6.4 billion, or 41.6 percent, while time and savings deposits at commercial banks increased 9.2 percent. The surge in deposits at thrift institutions is due, in part, to the availability of the new money-market type accounts, which have allowed savings and loans to compete more effectively in the savings market.

Table 26

Time and Savings Deposits at Michigan Financial Institutions, 1977-1983
(Billions)

	1977	1978	1979	1980	1981	1982	1983
Commercial Banks	$24.1	$26.6	$29.1	$31.0	$34.2	$37.1	$40.4[1]
Savings and Loans	11.8	13.2	14.4	15.9	15.9	15.4	21.8
Credit Unions	2.8	3.2	3.5	3.6	3.7	4.2	4.9
Total	$38.7	$43.0	$47.0	$50.5	$53.8	$56.7	$67.1

[1]Estimated.

Source: Federal Deposit Insurance Corporation; Federal Home Loan Bank of Indianapolis; Michigan Credit Union League.

1984 Outlook

In 1984 the Fed will continue to be committed to promoting a sustained, noninflationary recovery. The Fed's target for growth in M1 in 1984 is 4 to 8 percent, one percentage point lower than the target in the second half of 1983. Some tightening can be expected during the year as private credit demands increase and begin to compete with the federal government's demand for funds. The discount rate, which was increased from 8.5 to 9 percent in April, could be pushed higher during the year if strong economic growth continues.

The Fed is reluctant to lower interest rates for fear of overstimulating an already strong economic recovery and increasing inflation. Chairman Volcker clearly stated his continuing concern about inflationary pressures in February: "As the expansion proceeds, and as some of the temporary factors restraiming prices recede, we as a nation simply cannot afford to permit inflation to attain a new momentum. Our monetary policies are, and in my judgment must continue to be, geared to avoid that danger." (Federal Reserve Bulletin, February 1984, p. 102.)

The Treasury bill rate is expected to rise steadily in 1984 to 10.2 percent. Long-term rates, as represented by Triple-A corporate bonds, are expected to rise moderately during 1984 ending the year between 12.8 and 13.0 percent.

Short-term rates will be pushed upward in 1984 by the Treasury's need to borrow to finance the large budget deficit. If the federal government continues to absorb three-quarters of net new domestic savings--as occurred in 1983--rising private credit demands of consumers and businesses will intensify the competition for available funds. In addition, if the inflow of foreign capital slows in 1984, federal borrowing will place increasing pressure on U.S. financial markets.

Time and savings deposits at financial institutions, both nationwide and in Michigan, will increase at a slower pace in 1984 than in 1983, despite the improved growth in real disposable income in 1984. This slower growth occurs because the large transfer of funds into MMDAs was largely complete in the first half of 1983 and will not be repeated in 1984. However, rising interest rates in 1984 should attract additional funds into MMDAs and large time deposits at financial institutions.

CONSTRUCTION

1983 Developments

Declining interest rates during the second half of 1982 and the first half of 1983 helped the construction industry to make a substantial recovery in 1983. United States housing starts made a strong recovery from an extremely low base by rising to 1.7 million, an increase of 60.2 percent (see Table 27). Nationwide, recovery was less dramatic in public works and in private nonresidential construction, which declined.

Table 27

U.S. New Private Housing Starts, 1974-1983
(Thousands)

Year	Housing Starts	Percent Change
1974	1,337.7	- 34.6
1975	1,160.4	- 13.3
1976	1,537.5	32.5
1977	1,987.1	29.2
1978	2,020,3	1.7
1979	1.745.1	- 13.6
1980	1,292.2	- 26.0
1981	1,084.2	- 17.1
1982	1,062.2	- 2.0
1983	1,701.3	60.2

Source: Construction Review, U.S. Department of Commerce, Bureau of Industrial Economics, Construction and Building Products Division, selected issues.

Residential construction in 1983 rose almost 41 percent in constant dollars over the depressed levels of 1982. When the decline in interest rates slowed in mid-1983, the improvements in employment and income helped sustain new home sales.

Investment in nonresidential structures fell by 7 percent in 1983. Most of this decline occurred in industrial structures where construction fell by almost 27 percent because of the completion of projects begun before the recession and the existence of excess productive capacity early in the recovery. Also contributing to the decline was the overbuilding of office buildings in some cities.

Michigan's construction industry shared in the 1983 recovery, but not as strongly because of the more depressed state economy in 1982 and the large, reasonably-priced housing stock in Michigan relative to other sections of the country. Residential building permits increased by nearly 60 percent from extremely depressed levels in 1982 (see Table 28). This rebound was stimulated by the sharp decline in average mortgage interest rates that occurred during 1982 and by the improving economy.

Table 28

Michigan Residential Building Permits, 1974-1983

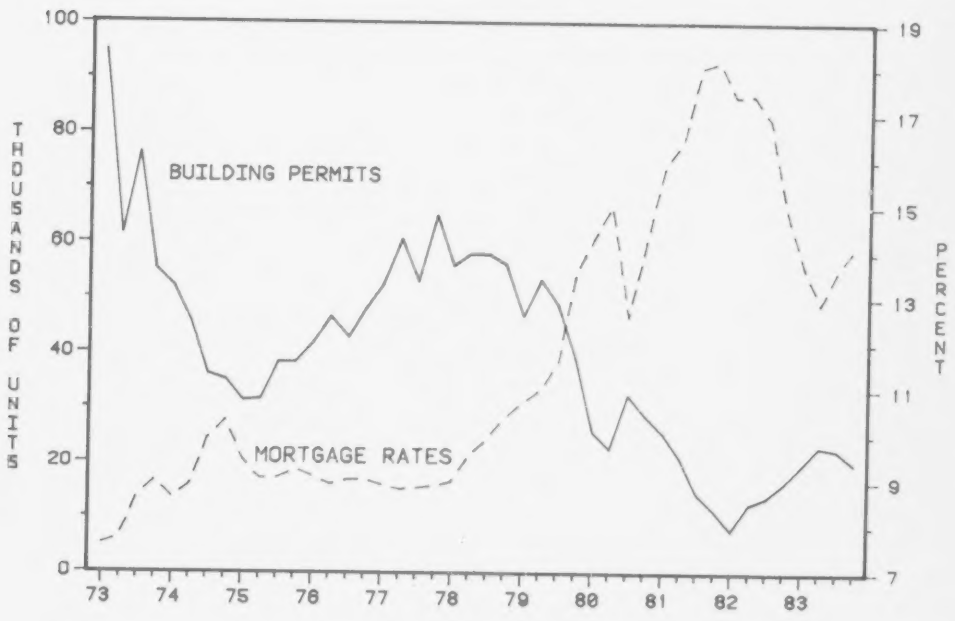
Year	Private[1] Single Family	Private[1] Multi-Family	Public	Total	Percent Change
1974	26,481	17,710	100	44,291	-37.8
1975	26,653	10,121	116	36,890	-16.7
1976	32,331	13,564	-0-	45,895	24.4
1977	41,314	17,370	-0-	58,684	27.9
1978	43,384	17,687	-0-	61,074	4.1
1979	33,959	15,298	48	49,305	-19.3
1980	17,870	11,106	852	29,828	-39.5
1981	11,624	6,739	305	18,668	-37.4
1982	8,213	5,535	100	13,848	-25.8
1983	15,143	6,711	215	22,069	59.4

[1]A housing unit is a single room or group of rooms intended for occupancy as separate living quarters by a family, a group of unrelated persons living together, or a person living alone.

Source: Construction Review, U.S. Department of Commerce, Industry and Trade Administration, December 1983.

The importance of the improving economy can be seen by the fact that fixed-interest mortgage rates reached their low point in June 1983 at 12.81 percent and have moved irregularly upward since then (see Chart 9). On the other hand, building permits increased until the very end of the year. The upward trend resumed early in 1984, in part because of unusually mild weather. The relatively subdued recovery is also shown by construction employment which averaged only 85.9 thousand in 1983 compared to 89.5 thousand in 1982. This reflected excess capacity in the severely depressed construction industry in 1982, as well as increases in productivity.

Chart 9
Michigan Residential Building Permits
and Mortgage Rates, 1973-1983



Source: U.S. Department of Commerce, Bureau of the Census and Federal Home Loan Bank of Indianapolis.

The 1983 recovery in Michigan residential construction is also evident in the rise in the value of contract awards, an increase of 69.1 percent to just below the level of 1980. Nonresidential construction rose only 8.3 percent, reflecting idle capacity in the commercial and industrial sectors.

Table 29

Michigan Construction Contract Awards, 1966-1983
(Thousands)

Year	Nonresi-dential	Resi-dential	Total Building	Public Works & Utilities	Total Construction
1966	$ 930,000	$ 835,030	$1,765,030	$ 333,200	$2,098,230
1967	946,513	1,020,000	1,966,513	357,000	2,323,513
1968	912,849	1,029,581	1,942,430	407,537	2,349,967
1969	962,697	891,531	1,854,228	874,715	2,728,943
1970	955,592	942,760	1,898,352	1,052,245	2,950,597
1971	874,058	1,319,978	2,194,036	840,719	3,034,755
1972	1,010,891	1,596,633	2,607,524	842,780	3,450,304
1973	1,206,481	1,856,354	3,062,835	1,299,276	4,362,111
1974	1,355,623	1,314,147	2,669,770	791,628	3,461,398
1975	951,139	1,089,145	2,040,284	1,146,796	3,187,080
1976	1,111,835	1,481,164	2,592,999	592,738	3,185,737
1977	1,525,733	2,144,489	3,670,222	604,463	4,274,685
1978	1,752,267	2,469,130	4,221,397	1,821,304	6,042,701
1979	1,975,434	2,392,063	4,367,497	889,324	5,256,821
1980	1,970,299	1,535,367	3,505,666	667,944	4,173,610
1981	1,336,850	1,122,958	2,459,808	798,406	3,258,214
1982	1,179,900	869,400	2,049,300	487,100	2,536,400
1983[1]	1,277,800	1,470,100	2,747,900	764,900	3,512,800

[1]Preliminary.

Source: F. W. Dodge Division of McGraw-Hill Information Systems Company, special release.

Also, many large industrial and commercial projects continued into the recession as firms built in anticipation of future needs and Michigan industry continued to spend on modernization. Improving financial conditions for state and local governments and continued utility construction led to a 57 percent rise in public works and utility construction. Highway construction, largely for rehabilitation, totaled $384 million in contract awards, up from $146 million in 1982. This increase was aided by a $135 million state bond issue. Overall, 1983 represented a recovery year for the Michigan construction industry.

1984 Outlook

Although interest rates are expected to rise during 1984, the rise in the long-term rates, expected to be less than one-half a percentage point, will not prevent continued recovery in the construction industry. Nationally, housing starts are expected to rise over 12 percent. They will be spurred by the improved income and employment situation that developed during 1983 and by consumer efforts to buy in advance of expected interest rate increases. Although likely to be weaker than single family construction, U.S. multi-family construction will also increase, especially in the northeast and mid-west which did not suffer the overbuilding that occurred in the sunbelt.

Industrial and commercial construction should also increase during 1984 as some industries build new capacity and others replace inefficient, existing structures. Also, after-tax business profits have been very strong while price increases of construction materials have been relatively small.

In housing starts, Michigan is expected to do about as well as the nation with an increase of approximately 12 percent. The positive effects of higher income and employment will be partly offset by a good supply of homes for sale and slowly rising interest rates. Nonresidential construction is also estimated to improve during 1984 as increased industry profits, tightened capacity, and the need to modernize encourage commercial and industrial investments. A gain of 15 percent in nonresidential construction is possible. Public works and utilities should show some improvement, although major power-plant construction is slowing. The state and its municipalities will be in an improved financial condition in 1984 which should contribute to expanded public works construction.

AGRICULTURE

1983 Developments

The past year saw some improvement in Michigan farm income though improvement was largely from the "payment-in-kind" (PIK) program and conditions of drought in many parts of the country. Although crop prices rose steadily during the year, some livestock prices weakened. The value of farm marketings increased 3.4 percent between 1982 and 1983 with most of the increase in crops. This increase helped slow the decline in the financial health of the farm sector in Michigan and nationally. Table 30 shows the pattern of Michigan farm marketings in 1982 and 1983.

Table 30

Michigan Cash Receipts from Farm Marketing, 1982 and 1983
(Millions)

Period	Livestock & Prod.		Crops		Total	
	1982	1983[1]	1982	1983[1]	1982	1983[1]
Jan.	$ 95.7	$ 99.0	$ 140.4	$ 137.2	$ 236.1	$ 236.2
Feb.	87.3	94.5	93.2	103.8	180.5	198.3
March	98.4	99.8	112.4	114.7	210.8	214.5
April	100.5	99.9	112.1	91.7	212.6	191.6
May	102.9	99.8	92.6	82.6	195.5	182.4
June	98.8	101.5	82.6	84.8	181.4	108.3
July	96.0	94.2	129.5	190.4	225.5	284.6
August	94.8	97.4	107.0	155.7	201.8	253.1
Sept.	98.6	98.8	137.2	157.2	285.8	256.0
Oct.	101.7	101.7	181.2	191.0	282.9	292.7
Nov.	96.3	96.5	271.7	285.7	368.0	382.2
Dec.	104.1	109.5	227.6	172.7	331.7	382.2
Total	$1,175.1	$1,192.6	$1,687.5	$1,767.6	$2,862.6	$2,960.2

[1]Preliminary.

Source: U.S. Department of Agriculture.

Farm marketings exceeded the value of production in Michigan reflecting some carry forward from previous years. This is clearly reflected in the crop statistics which show reduced production but slightly increased marketings. Crop production was adversely affected by a cold spring and a dry, hot summer. Improving weather in late summer and early fall generally prevented heavy losses. The production of corn, the most important field crop in Michigan, decreased 44 percent but acreage harvested dropped 34 percent because of the PIK program. The 1983 production is compared to record corn production in 1982. Of the field crops, only the production of sugar beets and alfalfa hay increased in 1983, while soybean production set a record for yield per acre.

Among other crops, tart cherries suffered weather damage from the late, cold spring and summer heat causing production to drop approximately two-thirds to 87 million pounds. Among other fruits, production of grapes and prune-plums increased.

The number of cattle declined in Michigan for the first time in several years, with the decline occurring among beef cattle. The number of hogs reached a record in Michigan not equaled since 1944, while the number of U.S. hogs also rose in 1983. Livestock producers had their profits hurt by the sharp rise in corn and feed grain prices which stemmed, in part, from the drought and in part from the effects of the PIK program.

Table 31 examines the price pattern for several major crops and important livestock products. The sharp price increases for corn and feed grains occurred in the summer and fall. On the other hand, hog prices fell sharply and cattle prices ended the year very near to where they started. This price decline has squeezed the profits of both hog and cattle producers in Michigan as well as the United States. Meat prices were affected somewhat by the reduction of cattle herds. Egg prices increased sharply during the year reflecting earlier low profits in the industry, summer heat, and avian flu.

Potato prices increased because bad weather damaged the potato crop. The dry bean crop escaped significant damage, but prices increased because of a poor crop in Ontario.

Despite an overall rise in prices received by Michigan farmers late in the year, prices averaged 0.9 percent below 1982 levels. Prices paid by farmers nationally rose 3.1 percent and probably increased similarly in Michigan. This meant no improvement in the profitability of agricultural production, although price increases late in the year and PIK payments generated an increase in net farm income to $530 million.

The number of farms and total farm acreage remained constant in 1983. Michigan had 65,000 farms containing 11.5 million acres.

Table 31

Prices Received by Michigan Farmers, 1983
(Per Unit)

Month	Corn (Bu.)	Wheat (Bu.)	Oats (Bu.)	Dry Beans (Cwt.)	Soybeans (Bu.)	Potatoes (Cwt.)	Baled Hay (Ton)
Jan.	$2.25	$3.29	$1.56	$10.30	$5.46	$ 4.55	$57.00
Feb.	2.43	3.53	1.60	9.90	5.38	4.90	53.00
Mar.	2.64	3.53	1.56	10.70	5.80	4.70	53.00
Apr.	2.82	3.58	1.55	12.80	6.07	5.30	53.00
May	3.12	3.32	1.63	14.20	5.87	4.95	44.00
June	3.12	3.32	1.63	14.20	5.87	4.95	44.00
July	3.10	3.44	1.57	18.90	6.28	10.00	34.00
Aug.	3.41	3.41	1.54	25.10	7.86	10.00	37.00
Sept.	3.42	3.44	1.64	25.10	8.46	7.10	42.00
Oct.	3.20	3.36	1.97	24.00	7.91	6.60	68.00
Nov.	3.16	3.21	2.14	24.30	8.01	7.10	68.00
Dec.	3.14	3.24	2.18	25.40	7.68	6.20	71.00
Avg.	$2.98	$3.39	$1.71	$17.91	$6.72	$ 6.36	$52.00

Month	Hogs (Cwt.)	Beef Cattle (Cwt.)	Steers & Heifers (Cwt.)	Slaughter Cows (Cwt.)	Calves (Cwt.)	Wholesale Milk (Cwt.)	Eggs (Doz.)
Jan.	$55.20	$44.90	$52.60	$37.80	$55.20	$13.90	$.44
Feb.	56.60	48.20	55.30	40.80	60.80	13.80	.47
Mar.	50.00	50.50	57.00	42.90	64.90	13.70	.49
Apr.	46.60	52.00	58.60	41.80	61.60	13.70	.49
May	44.10	51.50	57.40	43.40	67.00	13.30	.52
June	44.20	51.00	57.40	43.30	67.00	13.30	.52
July	47.70	48.80	54.80	41.10	57.10	13.20	.49
Aug.	43.40	45.30	51.50	38.10	54.20	13.30	.56
Sept.	43.70	45.00	51.50	37.80	52.40	13.50	.51
Oct.	40.00	43.30	50.30	36.00	51.20	13.80	.67
Nov.	37.50	42.50	50.90	34.70	51.00	14.10	.67
Dec.[1]	44.20	43.40	53.60	34.50	47.60	14.00	.71
Avg.	$46.10	$47.20	$54.24	$39.34	$57.50	$13.63	$.52

[1]December 15th price.

Source: Agriculture Across Michigan, U.S. Department of Agriculture and the Michigan Agricultural Reporting Service.

1984 Outlook

Both acreage planted and crop production are expected to increase in Michigan and the nation for most field crops. Prospective planting of corn is up 45 percent in Michigan, compared to 36 percent nationally. Soybeans, dry beans and hay also are up, but by much smaller amounts. A major factor in this shift, especially for corn, is the expected reduction in price support levels. The PIK program is not expected to be repeated, except for wheat. Although PIK payments will continue, the program will, in the case of wheat, be less attractive. Currently winter wheat planting is up 14 percent. Nationally, planting intentions are also up, especially for corn and oats.

The drought, acreage cutbacks, and greater consumption have reduced carry over for feed grains. U.S. crop exports are expected to rise in value but decline in volume, because of the strong dollar and the fact that the United States is ahead of Western Europe and most of the rest of the world in economic recovery. Debt problems continue to hurt East European and South American exports. Wheat remains in heavy oversupply because of large inventories.

Market prices for grain crops in 1983-84 are expected to remain strong although they should weaken later in the year as they did in 1983. Corn is estimated to be $3.14 per bushel and soybeans nearly $8 per bushel. However, the increased plantings are likely to drop prices by late in 1984 to just above the federal loan rates for corn ($2.55 per bu.) and wheat ($3.30 per bu.) despite stronger domestic and foreign demand.

Because of poor profitability, cattle and hog producers are expected to cut back in the number of animals. This cutback may be slightly less pronounced in Michigan but will occur here also. Nationally, meat production is expected to fall during 1984 by one percent. Reduced production, combined with rising personal income, is expected to increase meat prices and the value of livestock marketings by late in 1984. With feed costs declining, improved income in this sector is likely.

Crop farmers will also increase their gross receipts but farm income is unlikely to rise as farm costs will increase. In contrast to the PIK program which generated receipts but few production costs, current planting will increase production cost, thus reducing farm income. If fruit and other specialty crops have a normal year, Michigan net farm income is expected to decline about three percent from 1983, entirely because of reduced price supports.

MINERAL SUPPLIES AND MINING

1983 Developments

Demand increased for most minerals and metals during 1983 because of the improving economy. The strongest increases in demand were for aluminum, zinc, and flat-rolled steel which reflected the improved demand for consumer durables. While price increases for metals were generally moderate, prices for lead and nickel actually decreased. Only aluminum ingot and iron and steel scrap showed strong price increases, with the price of aluminum up 45 percent. Supplies of minerals and metals were adequate with large inventories holding down the prices of some minerals, such as nickel and copper. The economic recovery helped to reduce inventories, especially toward year's end.

Generally, Michigan mineral producers shared in the economic recovery. However, they were recovering from an extremely depressed level of activity in 1982, as were many mineral producers in the United States and world wide. Among the Michigan producers who enjoyed an improvement in economic conditions were the iron-ore producers, as steel production recovered from its near-depression levels in 1982--the amount of iron ore that was shipped rose from 7,027,000 long tons to 10,148,000 long tons in 1983. The value of most construction-related minerals rose with the recovery in construction, again recovering from very low levels, as shown in Table 32. In Michigan, the recovery in construction has not been strong enough to bring these industries back to the levels of the 1970s.

Not all mineral products increased in production or value in 1983. Despite a small increase in the estimate for oil production, the softening of oil prices slightly lowered the value of Michigan oil production. Salt production fell because of two consecutive, relatively mild winters and the slow recovery of the demand for industrial chemicals. For the first time in one hundred and forty years, no copper was produced in Michigan in 1983. With the suspension of mining at the White Pine Mine in Ontonagon County, Michigan has no operating, commercial copper mine. Rising copper prices may allow the reopening of this mine in the near future.

Table 32

Michigan Mineral Production, 1982 and 1983

Mineral	1982 Quantity	1982 Value (Millions)	1982 Percent of Total Value	1983 Quantity	1983 Value (Millions)	1983 Percent of Total Value	Percent Change in Value 1982-83
Metallic							
Copper: recoverable content, including silver (short tons)	19	$ 35.2	1.4	0	0.0	—	-100.0
Iron Ore: usable, gross weight (thousand long tons)	7,027	328.9	13.0	10,148	477.8	18.8	45.3
Total Metallic Value		$ 364.1	14.4		$ 477.8	18.8	31.2
Nonmetallic							
Fuels							
Natural Gas (million cu. ft.)	144,468	$ 461.0	18.3	136,000[1]	$ 476.0[1]	18.6	3.3
Petroleum (thousand 42-gal. barrels)	31,462	1,023.5	40.6	32,200[1]	928.0[1]	36.4	- 9.3
Subtotal Fuel Value		$1,484.5	58.9		$1,404.0	55.1	- 5.4
Other Nonmetallics							
Cement	3,390	$ 158.3	6.3	4,085	$ 195.1	7.7	23.2
Masonry (thous. short tons)	136	8.8	0.3	185	12.2	0.5	38.6
Portland (thous.short tons)	3,254	149.5	5.9	3,900	182.9	7.2	22.3
Clay (thousand short tons)	1,022	4.4	0.2	1,530	6.7	0.3	52.3
Gypsum (thousand short tons)	682	5.2	0.2	790	6.3	0.2	21.2
Lime (thousand short tons)	571	26.8	1.1	583	27.9	1.1	4.1
Natural Brines (bromine,calcium chloride, iodine & magnesium)	n.a.	229.1	9.1	n.a.	172.1	6.8	- 24.9
Peat (thousand short tons)	241	4.9	0.2	186	3.4	0.1	- 10.2
Salt (thousand short tons)	2,002	106.3	4.2	1,331	89.8	3.5	- 15.5
Sand/Gravel (thous.short tons)	23,487	69.7	2.8	26,500	80.2	3.2	15.1
Stone	20,704	67.2	2.7	25,004	82.6	3.2	22.9
Dimension (thous.short tons)	20,700	67.1	2.7	25,000	82.5	3.2	23.0
Crushed (thous. short tons)	4	0.1	—	4	0.1	—	—
Subtotal Other Nonmetallic		$ 671.9	26.7		$ 664.1	26.1	- 1.2
Total Nonmetallic Value		$2,156.4	85.6		$2,068.1	81.2	- 4.1
Grand Total		$2,520.5	100.0		$2,545.9	100.0	1.0

[1]Estimate.

Source: U.S. Bureau of Mines and Michigan Department of Natural Resources, Geological Survey Division.

1984 Outlook

The outlook for mineral supplies and metals is generally favorable for 1984 with adequate supplies expected for all major minerals and metals. Oil supplies also appear to be adequate, barring a major disruption of world supply.outside of the flat, rolled types. This increase in demand is driven by rising construction and capital goods usage. The economic recovery is beginning to pull the mineral industries out of the deep recession. This has led to some price increases although prices are not expected to move sharply higher for most commodities. The strongest demand increases are expected for copper, lead, ferro-alloys and steel. Copper is likely to show a considerable increase in price during 1984, with prices rising from .15 to .18 cents per pound by year end. Aluminum is likely to be produced at close to 90 percent of worldwide capacity, helping raise prices by as much as 14 percent.

Michigan mineral producers should also enjoy continued recovery during 1984. Iron ore production could easily reach 12 million tons. This will be entirely from the Empire and Tilden Mines with other mines remaining closed until conditions improve further. Continued improvement in construction should result in further increases in the production of sand, gravel, gypsum and cement. In 1984, oil and gas production is estimated to hold steady, as will its value. Older wells will continue to decline, but new finds will partially offset this trend. Because of disappointing results in some northeast lower Michigan drilling sites, a small decline in production is possible. A new oil field with some promise, the Stone Point Field, is being developed in southern lower Michigan near the old Albion-Scipio Field.

Callihan Mining is developing the old Ropes Gold Mine in Marquette County with an opening of the mine planned for July 1985. This would resume gold mining in Michigan for the first time in many decades.

The Department of Natural Resources will hold a second metallic minerals lease sale in 1984. The one in 1983, the first in many years, was well received.

Overall, it is estimated the value of 1984 mineral production will rise 6 percent over 1983, largely reflecting higher production but with some price increases. The primary production increases will be in iron ore and nonmetallic, nonfuel minerals.

TRANSPORTATION

1983 Developments

An important component of any growing economy is a good transportation system. A good transportation system not only facilitates the movement of people, but it also allows businesses to distribute their goods and services in a more efficient manner. Michigan's statewide transportation network--state highways, county roads, city streets, airports, railroads and intercity and intracity passenger services--has suffered during the last few years due to the recession and the lack of funds to adequately finance these transportation modes. In fact, revenues going into the Michigan Transportation Fund (MTF), the major fund supporting transportation programs in Michigan, fell from $759.9 million in fiscal year 1979 to $698.1 million in fiscal year 1982, a decline of 8.1 percent. After adjusting for inflation the decline was a severe 31.7 percent. This reduction in revenue resulted in the postponement of needed maintenance on streets and highways and funding cuts for public transportation programs throughout the state. To help remedy this serious problem the federal government raised the federal excise tax on gasoline and, in Michigan, the motor fuel and vehicle registration taxes were restructured and increased in 1983. As a result, MTF revenue increased 4.3 percent in fiscal year 1983 which, along with a special bond sale, helped finance needed improvements and repairs in the state transportation system.

Highways

By design, most of the attention on the state highway system was focused on rehabilitation and maintenance, rather than expansion, in 1983. In fact, more miles of highway were improved than deteriorated into poorer condition for the first time in at least ten years. This was made possible by increases in revenue earmarked for transportation and the mild winter which reduced the cost of ice and snow removal, enabling more money to be used for maintenance projects. Total maintenance expenditures on the 9,470-mile state highway network increased 3.2 percent to $120.8 million in 1983.

The only expansion of the highway system in 1983 occurred in December when twelve miles of U.S.-131 near Big Rapids were opened. Work continued on the midsection of the final link of I-69 north of Lansing, on M-21 between Lapeer and Port Huron and on the final 7.9 miles of I-696 through southern Oakland County.

Aeronautics

The volume of air travel in Michigan increased in 1983 after declining steadily since the recession began in 1980. The number of passengers boarding and deplaning at Michigan's 23 airports with scheduled airline service totaled 11.7 million people in 1983, up 6.4 percent from the 11 million air travelers in 1982. The record for air passengers--14 million people--was set in 1979. The Detroit Metropolitan Airport continued to be the state's busiest airport accounting for 77.8 percent of all air travelers in 1983. The remaining major airports, with their shares of the state's passenger activity in 1983, were: Kent County International Airport (Grand Rapids), 8.4 percent; Capital City Airport (Lansing), 2.9 percent; Tri-County Airport (Saginaw), 2.7 percent; and Kalamazoo Municipal Airport, 1.7 percent.

In addition to air passengers, the number of airplane departures and arrivals at Michigan's airports rose substantially in 1983. In 1982, aircraft traffic at the fourteen airports with Federal Aviation Administration control towers totaled 1.38 million departures and arrivals, but in 1983 they rose 16.1 percent to 1.6 million.

Intercity Passenger

Intercity passenger transportation services include both railroads and buses. The year 1983 marked the end of the first decade of the redevelopment of rail passenger service in Michigan. Since 1973, major improvements have been made in tracks and passenger facilities. In response to these improvements, the number of rail passengers increased from 157,000 in 1973 to over 500,000 in 1983. Intercity bus service changed considerably during 1983 because of deregulation in the bus industry. As a result, rates came down on the more popular routes, 65 applications were received by the Department of

Transportation for new or expanded routes and applications were also received to discontinue service on more than 100 urban and rural routes.

To help serve passengers that use both rail and bus services, transportation centers have been established in a number of cities. In 1983, Pontiac opened a transportation center, thus joining Alma, Battle Creek, Cadillac, Dowagiac, Houghton, Kalamazoo and Marquette which already have centers. Transportation centers are currently under construction in Flint and Niles.

Local Public Transportation

Urban bus systems operate in Ann Arbor, Battle Creek, Bay County, Benton Harbor, Detroit, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Muskegon, Niles, Port Huron, and Saginaw. Ridership in the Detroit area declined 19 percent to 73.4 million people in 1983. The other thirteen systems increased ridership slightly, from 24.3 million in 1982 to 24.6 million in 1983.

In addition to the urban bus systems, 29 nonurban bus systems operate in Michigan. Ridership on these systems fell 7 percent in 1983 mainly due to reductions in federal aid which forced cutbacks in service and personnel. With the reduction in federal funds going to local transit systems, additional local funding will be required to maintain the current operating levels. During 1983, transit millages were approved in the cities of Holland, Ionia, Lansing, and Ludington, and the counties of Gladwin and Otsego.

1984 Outlook

The general improvement in Michigan's economy in 1984 should have a positive impact on the amount of state government revenue going to transportation programs. Motor fuel tax revenue is expected to increase 14.6 percent due to a 2-cent increase in the tax rate on January 1, 1984, and a likely increase in fuel consumption. Vehicle registrations are forecast to rise 3 percent in 1984 due to the increases in economic activity, and this will help boost vehicle registration tax revenue. As a result, Michigan Transportation

Transportation

Fund revenue is expected to increase 14 percent to $832.6 million in fiscal year 1984. In addition the state is expecting an increase in federal aid stemming from the 1982 Surface Transportation Assistance Act. Two bond sales totaling $110 million will also help finance needed improvements in all types of transportation programs and services in 1984.

Highway projects will again focus on maintenance of the existing system, including the resurfacing of many miles of roads and highways, the rehabilitation of Detroit area freeways and continued work on the Zilwaukee Bridge. In addition, construction of M-21, I-69, I-696 and US-131 will continue. Late in the year, M-21 is expected to be completed and eight miles of I-69 will open.

Earlier this year $60 million in bonds were sold by state government to help finance a variety of public transportation and railroad improvements. These programs include purchasing several hundred miles of railroad lines currently threatened with abandonment, purchasing transit buses and helping finance the "people-mover" in downtown Detroit and preliminary engineering and design of a light rail system in southeastern Michigan. In addition, Amtrak service is expected to expand in mid-1984 with the start up of a new passenger service linking Grand Rapids, Holland and Chicago.

TOURISM

1983 Developments

Michigan's tourist industry enjoyed an increase in both the number of tourists and the amount of money spent by these tourists in 1983. These improvements in tourism can be attributed to the improved level of economic activity in both Michigan and the states that surround Michigan (see State and Regional Comparisons). It is estimated that tourists spent $6 billion in Michigan in 1983, an increase of 9 percent from the $5.5 billion that was spent in 1982. This spending helped support 142,000 jobs in tourist-related businesses, as well as 111,000 jobs in other sectors of the economy providing products and services to tourist-related businesses.

Michigan's major tourist attractions include its natural resources--the Great Lakes, its many inland lakes and rivers, and its remote forests. To help tourists enjoy these natural wonders, the state maintains 83 state parks throughout the state. In 1983, approximately 5.3 million people camped overnight at these state parks, which was down a slight 0.3 percent from the number of overnight park visitors in 1982. This modest decline was primarily due to a cool, wet spring that reduced camping 12 percent in the second quarter of 1983. Camping during the remainder of the year did top the year-ago level. While overnight camping was down slightly, day use of the parks was up dramatically. In 1983, 17.5 million people visited state parks for single-day outings, which was 17 percent above the 14.9 million visitors in 1982. The most popular state parks in 1983 were all located in western Michigan. Holland State Park had the largest attendance followed by Warren Dunes, Grand Haven and Ludington.

Another good barometer of tourist activity is highway traffic; two excellent measures of this are Mackinac Bridge crossings and the number of visitors at travel information centers. In 1983, 2.4 million vehicles crossed the 26-year-old five mile long bridge. This was 5.7 percent more traffic than in 1982. The number of people stopping at travel information centers also reflected increased tourist travel in Michigan in 1983. Travel information centers are strategically located along state highways to provide information to tourists on the many attractions and events in Michigan. In 1983, visitors at these information centers rose 8.1 percent.

Vacationing families and convention attendees not only help Michigan's economy by spending money on hotels and motels, food, gasoline and souvenirs, but they also contribute to several state taxes--primarily the sales, use and gasoline taxes. While the total amount of these taxes paid by tourists is not known, the sales and use tax collections from hotels and motels are a good measure of tourist activity and business travel. In 1983, these tax collections rose 10.6 percent to $20.5 million. In 1982, these tax collections totaled $18.5 million, which was up only 2.2 percent from the previous year.

Table 33

Michigan Tourist Indicators, 1982 and 1983
(Thousands)

Indicator	1982	1983	Percent Change
State Parks			
Overnight Camping	5,310.9	5,293.5	- 0.3
Day Visitors	14,933.7	17,533.8	17.4
Total	20,244.6	22,827.3	12.8
Mackinac Bridge Crossings	2,296.0	2,426.8	5.7
Travel Information Center Visitors	1,847.6	1,997.7	8.1
Hotel and Motel Sales and Use Tax Collections	$18,493.5	$20,454.0	10.6

Source: Michigan Department of Commerce, Travel Bureau.

1984 Outlook

Tourist activity in 1984 is expected to improve from the 1983 level, reflecting continued economic recovery in Michigan and the nation. In fact, tourism is already off to a good start in 1984 with an increase in the number of tourists

participating in winter sports. In 1983, an unusually mild winter greatly curtailed tourism, but in 1984, nature was much more cooperative and winter tourism rose dramatically.

During the remainder of 1984, the tourist industry should enjoy increased activity compared to a year ago, as the economic climate improves. Total income earned by individuals is expected to be up 9 percent in 1984 and the number of people with jobs is is forecast to increase 2.2 percent. Similar economic improvements are expected to occur in other states surrounding Michigan. These developments should boost the number of people taking vacations and business-related travel. Another factor that will help increase tourist activity during 1984 is the opening of Auto World in Flint in July. Overall, tourist volume is forecast to rise 5 percent in 1984 and tourist expenditures are expected to grow 8 percent.

INTERNATIONAL TRADE

1983 Developments

Strong economic growth in the U.S. contributed significantly to the worldwide economic recovery in 1983. However, lower exports and sharply higher imports created record U.S. trade deficits during the year. As Table 34 indicates, the deficit in the U.S. current account balance, the broadest measure of U.S. international trade and financial transactions, increased from $3.7 billion in the first quarter of 1983 $15.3 billion in the fourth quarter of 1983.

Table 34

U.S. International Trade Balance, 1982 and 1983
(Billions)

Period	Merchandise Balance			Balance on Current Account
	Exports	Imports	Net Balance	
1982 I	$55.6	$61.7	$- 6.1	$ 0.6
II	55.0	60.9	- 5.9	1.4
III	52.2	65.3	-13.1	- 6.6
IV	48.3	59.7	-11.4	- 6.6
1983 I	49.4	58.2	- 8.8	- 3.7
II	48.8	63.5	-14.7	- 9.7
III	50.4	68.6	-18.2	-12.1
IV	51.5	70.3	-18.8	-15.3

Source: Economic Indicators, Council of Economic Advisors, April 1984. Data is seasonally adjusted.

The deficit in the U.S. merchandise trade balance--the difference between exports and imports of physical goods--nearly doubled in size from $8.8 billion in the first quarter of 1983 to $18.8 billion in the last quarter of 1983. For

the year, the trade deficit increased 66 percent to an unprecedented $60.5 billion. The 1983 merchandise trade deficit is almost twice as large as the record-setting 1982 deficit. Trade deficits of this magnitude imply significant losses of income and employment for U.S. export and import-competing industries.

The dramatic increase in the U.S. trade deficit in 1983 may by explained by several factors. The increasing value of the dollar has made U.S. firms less competitive in the world market. In real terms, the trade-weighted exchange value of the U.S. dollar appreciated 40 percent from the fourth quarter of 1980 to the first quarter of 1984. Second, exports to debt-troubled countries facing severe constraints on international borrowing have declined. Further, the earlier and stronger cyclical economic recovery in the U.S. resulted in a more rapid increase in U.S. imports relative to exports.

Exports rose to $49.4 billion in the first quarter of 1983 and increased each quarter in 1983 before reaching $51.5 billion in the fourth quarter, an increase of 4.4 percent. Although exports grew steadily in 1983, they remain below the level recorded in the first quarter of 1982. The demand for U.S. goods waned in response to the rise in the value of the U.S. dollar making these goods more expensive to foreign countries recovering from the world-wide recession. Imports increased significantly faster than exports in 1983, rising from $58.2 billion in the first quarter to $70.3 billion in the last quarter, an increase of 20.8 percent.

As indicated in Table 35, the value of goods manufactured in Michigan and exported abroad rose from $8.8 billion in 1980 to $10.3 billion in 1981, an increase of 17.0 percent. During the same period, U.S. manufacturing exports increased 8.7 percent. As Michigan's growth rate surpassed the national rate, the state's share of total U.S. exports rose from 5.8 percent in 1980 to 6.3 percent in 1981. As the growth rate increased in 1981, Michigan's ranking among states improved from the sixth to the fifth largest exporter of manufactured goods. Nonetheless, Michigan's ranking remains significantly below the number two spot reported in the 1977 census.

As a result of the relatively strong growth in Michigan manufacturing exports, the share of export employment in total state manufacturing employment continued to rise. In 1981 the percent of total employees involved in the direct manufacturing of exports increased to 7.6 percent from 7.4 percent in 1980. Although manufacturing export employment increased relative to total employment, the number of people employed in the industry actually declined due to the recession.

In addition to the 74,400 employed in direct manufacturing exports in 1981, another 68,400 worked in jobs supporting export manufacturing. The total of direct and supporting Michigan export manufacturing jobs reached 14.6 percent of total manufacturing employment in 1981, a 0.1 percentage point increase from 1980. In other words, for every 10 manufacturing jobs, approximately 1.5 jobs depend on exports.

Table 35

U.S. and Michigan Manufactured Goods Export Statistics, 1972-1981
(Billions)

	1972	1977	1980	1981
Manufactured Goods Exports				
U.S.	$36.6	$85.8	$151.2	$164.3
Michigan	$ 3.5	$ 6.9	$ 8.8	$ 10.3
Ratio Michigan to U.S.	9.6	8.0	5.8	6.3
Michigan's Rank Among States	1	2	6	5
Direct Export Employment as a Percent of Total Manufacturing Employment				
U.S.	4.1	5.6	7.2	7.3
Michigan	5.4	6.1	7.4	7.6

Source: Current Industrial Reports: Survey of Origin of Exports by Manufacturing Establishment, U.S. Department of Commerce, Bureau of the Census, selected issues, 1977, 1980 and 1983.

Canada is one of Michigan's major trading partners of autos, trucks, parts and tires. To broaden the market for automotive products, the U.S. enacted the Automotive Products Trade Act of 1965. This act removes U.S. duties and trade restrictions on certain new and used Canadian motor vehicles and parts. While Michigan is one of the most active states trading automobile parts to Canada, trade statistics are available only at the national level. The U.S. auto trade balance has weakened from a deficit of $2.4 billion in 1982 to a deficit of $2.6 billion in 1983, a $0.2 billion decline.

A comparison of the value of U.S. imports of Canadian automobile products in 1982 to 1983 indicates that cars increased from $5.8 to $7.3 billion and trucks increased from $3.2 to $3.6 billion. As gasoline prices fell, U.S. consumers increased their demand for larger cars which comprise a disproportionately high share of Canadian auto production.

The slight increase in U.S. exports of cars and trucks from 1982 to 1983 offset some of the trade balance deficit. During that period, the value of U.S. car exports rose from $2.3 to $3.9 billion and U.S. truck exports rose from $0.7 to $0.9 billion. While the motor vehicle balance of trade worsened, the U.S. experienced a slight improvement in the balance of trade for parts, Michigan's major auto-related export. Part exports grew from $7.8 billion in 1982 to $9.3 billion in 1983.

Even with the recession, total U.S. trade (the sum of exports and imports) under the automotive agreement increased from $24.2 billion in 1982 to $31.2 billion in 1983, a 28.9 percent increase (see Table 36).

Table 36

Trade Under the U.S. Automotive Agreement
with Canada, 1982 and 1983
(Billions)

	1982			1983		
Commodity	U.S. Exports	U.S. Imports	Balance	U.S. Exports	U.S. Imports	Balance
Cars	$ 2.3	$ 5.8	$-3.5	$ 3.9	$ 7.3	$-3.4
Trucks	0.7	3.2	-2.5	0.9	3.6	-2.7
Parts	7.8	4.0	3.8	9.3	5.7	3.6
Tires & Tubes	0.1	0.3	-0.2	0.2	0.3	-0.1
Total	$10.9	$13.3	$-2.4	$14.3	$16.9	$-2.6

Source: U.S. Department of Commerce.

Michigan agricultural exports fell 19.8 percent from a record high of $938.4 million in fiscal 1981 to $752.6 million in fiscal 1982. Most of this decline is explained by reduced shipments of corn and soybeans which accounted for 89.5 percent of the decline.

Although numerous factors contributed to this downturn, the importance of any single factor is difficult to assess. The world recession depressed export shipments, while the rise in the dollar value with respect to foreign currencies offset much of the decline in domestic prices and further curtailed demand for U.S. commodities. In addition, U.S. trade relations with a number of communist countries have deteriorated in recent years which also hindered export shipments. Nationally, farm exports declined from $43.8 billion to $39.1 billion during the same period.

As shown in Table 37, Michigan's ranking fell to 17th among all states in exports of agricultural products in fiscal 1982, compared with 15th in fiscal 1981. The top ten states ranked in descending order of the value of agricultural exports were Illinois with $3,306.4 million, Iowa with $3,026.1 million, California with $2,854.1 million, followed by Texas, Minnesota, Nebraska, Kansas, Indiana, Missouri and North Dakota.

Table 37

Michigan Agricultural Exports, Fiscal Years 1981 and 1982
(Millions)

Commodity Group	FY 1981	FY 1982	Percent of Total
Feed Grains	$400.8	$248.4	33.0
Vegetables & Dry Edible Beans	168.0	150.6	20.0
Soybeans	136.4	122.6	16.3
Wheat	121.6	123.1	16.4
Fruit	34.0	28.6	3.8
Hides & Skins	8.6	9.5	1.3
Animals & Meats (Excl. Poultry)	15.5	15.3	2.0
Dairy Products	10.9	16.1	2.1
Fats, Oils, & Greases	7.2	6.7	0.9
Poultry Products	5.2	4.1	0.5
Other	30.2	27.6	3.7
Total	$938.4	$752.6	100.0

Source: Foreign Agricultural Trade of the United States, U.S. Department of Agriculture, Economic Research Service, March/April 1983.

For individual commodity groups, Michigan's exports of vegetable and dry edible beans ranked fourth in the nation following California, Washington and Idaho. In addition, Michigan ranked sixth in exports of dairy products, as well as fruit and fruit preparations, and ninth in feed grains and products.

1984 Outlook

A strong dollar, growing protectionism, and restrictive trade policies will continue to dampen foreign purchases of U.S. products. As the growth of U.S. personal income slows later in 1984, imports will grow less rapidly. Nonetheless, the rate of growth for imports will still exceed that of exports as the strength of the U.S. recovery outdistances the economies of our trading partners. Exports are projected to remain flat before turning upward at year end. As a result, the U.S. merchandise trade deficit is likely to exceed $100 billion in 1984.

The surge in demand for autos will boost bilateral trade with Canada and increase the export of parts manufactured in Michigan. In the agricultural sector, cutbacks in domestic grain production have raised commodity prices which should reduce foreign demand for our commodities. However, more rapid economic growth should boost worldwide, food consumption--hence the value of U.S. exports. Nonetheless, due to the strong dollar, U.S. agricultural exports will continue to suffer a declining share of the world market.

APPENDIX A

SELECTED PUBLIC ACTS OF ECONOMIC SIGNIFICANCE

SELECTED PUBLIC ACTS OF 1983

BANKING AND FINANCE

Land Contracts (P.A. 1)
Extends 11 percent ceiling on mortgage and land contract rates to April 1, 1985.

Home Improvement (P.A. 13)
Home improvement finance rate capped at 16.5 percent until December 31, 1987.

Business Loans (P.A. 20)
Interest rates on loans from nonfinancial institutions to unincorporated businesses may not exceed 15 percent per year.

Secondary Mortgages (P.A. 43)
Clarifies sunset provisions for ceiling interest rates on second mortgages. The maximum interest rate is reduced from 18 to 15 percent after December 31, 1983.

Bank Reports (P.A. 94)
Coordinates state bank reporting requirements with federal reporting requirements.

CONSUMER PROTECTION

Energy Conservation (P.A. 80)
Extends the energy conservation loan program for residential utility customers until June 30, 1985.

Liquor Prices (P.A. 101)
Eliminates sunset date on provisions for the state markup on liquor prices and the allowable retailer profit margin.

Energy Emergency (P.A. 152)
Eliminates sunset date for the state energy emergency planning act.

Choking Aid (P.A. 178)
Requires the posting in food service establishments of instructions for dislodging an obstruction from a choking victim.

ECONOMIC DEVELOPMENT

Downtown Development Authority (P.A. 86)
Eliminates restrictions on use of revenue from two-mill ad valorem property taxes by downtown development authorities.

EMPLOYMENT

Youth Corps (P.A. 69)
Created Michigan Youth Corps to provide minimum-wage summer jobs for young people.

Medical Benefits (P.A. 162)
Requires employer to pay injury-related medical costs if employee has waived worker's compensation benefits.

Job Training (P.A. 173)
Provides that community-based organizations receive the same consideration in the grant awarding process under the federal Job Training Partnership Act as under CETA.

LOCAL GOVERNMENT

Revenue Sharing (P.A. 99)
Revises the formula used to calculate the income tax rate for determining revenues to be distributed under the revenue sharing act.

Municipal Borrowing (P.A. 106)
Permits an increase in the limit on municipal borrowing in anticipation of revenue sharing payments if payments are delayed.

Industrial Tax (P.A. 139)
Allows out-of-formula school districts to continue receiving industrial facility tax payments.

Revenue Sharing (P.A.146)
Requires an advance for August revenue sharing payments to cities, villages and townships from state income tax collections.

School Millages (P.A. 179)
Extends the deadline date for using school district property tax levies during the current school year.

Anticipation Notes (P.A. 204)
Allows local governments to borrow against anticipated inventory tax reimbursement from the single business tax.

Revenue Sharing (P.A. 236)
Requires the state to pay interest on delayed revenue-sharing payments to local governments.

NATURAL RESOURCES

Fish/Wildlife Fund (P.A. 189)
Permits the designation of $2 of income tax refund for wildlife research and habitat improvement for nongame species.

P.C.B. Silos (P.A. 220)
Authorizes the Department of Agriculture to dispose of silos contaminated with PCB and provides for reimbursement to farmers who disposed of their own silos.

Fish/Wildlife Fund (P.A. 241)
Establishes the nongame fish and wildlife fund to protect endangered species.

Berlin-Farro (P.A. 253)
Provides matching state funds to clean up toxic waste at the Berlin and Farro site in Genesee County.

TAXATION

General Fund (P.A. 14)
Creates state accounting and fiscal responsibility account (SAFRA) funded by a .25 percent income tax rate to revise various state accounting procedures.

Income Tax Hike (P.A. 15)
Increased income tax rate to 6.35 percent in 1983 and scheduled a gradual rollback in the rate.

Job Credit (P.A. 85)
Created a credit against the single business tax for hiring qualified summer youth employees.

Tax Bill (P.A. 88)
Permits township treasurer to send tax bill to designated agent that has entered into an escrow agreement to pay the tax or to an agent designated as such on a form made available by the treasurer.

Assessment Appeals (P.A. 163)
Establishes procedures for including subsequent property tax appeals when appearing before the tax tribunal.

Unemployment Exemption (P.A. 164)
Amends the employment security act by extending appeal periods for employers, provides for disqualification for people guilty of a theft after notice of a layoff or discharge for nonqualifying circumstances, and limits benefits to individuals in a family-owned business.

Vehicle Registration (P.A. 165)
Alters the tax rate and tax base under the value registration tax which replaced the weight tax on new cars purchased after September 30, 1983.

Solar Credit (P.A. 190)
Extends the income tax credit for the purchase of energy conversion devices to 1989 and expands the amount allowed for this credit; also repeals certain credits against the sales and use tax.

Fuel Tax (P.A. 244)
Requires prepayment of sales tax on gasoline and motor fuels at the time purchased or shipped by the wholesaler.

Heat Pumps (P.A. 245)
Groundwater heat pumps are excluded from the energy conservation property tax exemption.

Business Tax (P.A. 250)
Grants additional credits and exemptions under the single business tax to small and low-profit firms effective January 1, 1984.

TRANSPORTATION

Mopeds (P.A. 91)
Alters definition of moped to include some small motorcycles.

APPENDIX B

STATISTICAL TABLES

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Table B-1

Michigan Labor Force and Employment Estimates, 1970-1983
(Thousands)

Year	Total Labor Force	Employed[1]	Unemployed[2]	Percent Unemployed	Wage & Salary Workers	Workers in Labor Management Disputes
1970	3,590	3,350	241	6.7	2,999.1	36.1
1971	3,623	3,347	276	7.6	2,995.1	10.7
1972	3,694	3,437	258	7.0	3,119.0	2.8
1973	3,802	3,578	223	5.9	3,284.3	4.9
1974	3,817	3,591	288	7.4	3,277.7	9.9
1975	3,891	3,405	486	12.5	3,136.6	3.5
1976	3,989	3,617	373	9.4	3,283.1	6.4
1977	4,112	3,775	336	8.2	3,442.5	6.9
1978	4,194	3,905	289	6.9	3,609.4	5.4
1979	4,312	3,977	335	7.8	3,637.0	5.2
1980	4,290	3,756	534	12.4	3,442.8	6.0
1981	4,309	3,780	529	12.3	3,364.3	3.0
1982	4,278	3,617	661	15.5	3,193.3	3.7
1983	4,303	3,693	610	14.2	3,186.4	2.7
1982: January	4,218	3,542	676	16.0	3,204.6	2.2
February	4,229	3,547	682	16.1	3,196.7	2.3
March	4,238	3,516	722	17.0	3,204.5	1.0
April	4,203	3,551	652	15.5	3,188.9	0.8
May	4,306	3,692	614	14.3	3,234.6	1.2
June	4,319	3,702	617	14.3	3,224.3	12.5
July	4,385	3,740	645	14.7	3,188.0	1.5
August	4,358	3,724	634	14.5	3,170.0	2.9
September	4,286	3,665	621	14.5	3,191.4	1.6
October	4,257	3,624	633	14.9	3,185.9	1.6
November	4,240	3,545	695	16.4	3,168.5	0.9
December	4,305	3,562	743	17.3	3,161.9	0.3
1983: January	4,269	3,543	726	17.0	3,098.3	1.3
February	4,248	3,547	701	16.5	3,113.6	1.4
March	4,238	3,517	722	17.0	3,129.6	2.0
April	4,301	3,633	668	15.5	3,145.4	1.3
May	4,391	3,748	643	14.7	3,181.9	1.0
June	4,435	3,785	650	14.6	3,190.3	1.0
July	4,419	3,842	577	13.1	3,181.9	1.2
August	4,386	3,798	588	13.4	3,162.4	16.3
September	4,310	3,782	529	12.3	3,240.8	4.1
October	4,245	3,715	530	12.5	3,254.7	3.0
November	4,180	3,690	489	11.7	3,262.9	0.3
December	4,216	3,714	501	11.9	3,273.8	0.1

[1]Includes wage and salary, agricultural and self-employed--excludes striking workers.

[2]Excludes workers not actively seeking work and workers on strike.

Source: Michigan Employment Security Commission.

Table B-2

Michigan Labor Force, Employment and Unemployment, Quarterly Averages, 1975-1983
(Thousands)

Year/ Quarter	Labor Force	Employment	Unemployment	Percent Unemployed
1975: I	3,913	3,349	563	14.4
II	3,876	3,356	519	13.4
III	3,888	3,422	465	12.0
IV	3,887	3,490	396	10.2
1976: I	3,922	3,509	413	10.5
II	3,969	3,583	387	9.7
III	4,042	3,675	367	9.1
IV	4,021	3,697	325	8.1
1977: I	4,064	3,680	385	9.5
II	4,087	3,772	315	7.7
III	4,140	3,787	352	3.5
IV	4,161	3,866	294	7.1
1978: I	4,151	3,847	311	7.5
II	4,187	3,904	282	6.7
III	4,206	3,944	296	7.0
IV	4,230	3,965	266	6.3
1979: I	4,269	3,926	344	8.1
II	4,312	3,982	331	7.7
III	4,339	4,015	324	7.5
IV	4,330	3,988	341	7.9
1980: I	4,252	3,789	463	10.9
II	4,305	3,721	584	13.5
III	4,326	3,766	560	12.9
IV	4,279	3,751	528	12.3
1981: I	4,209	3,630	579	13.8
II	4,346	3,845	502	11.6
III	4,368	3,877	491	11.2
IV	4,313	3,768	545	12.6
1982: I	4,228	3,535	694	16.4
II	4,276	3,648	628	14.7
III	4,343	3,709	634	14.6
IV	4,267	3,577	691	16.2
1983: I	4,252	3,536	716	16.8
II	4,376	3,722	654	14.9
III	4,372	3,807	565	12.9
IV	4,213	3,707	507	12.0

Source: Michigan Employment Security Commission.

Table B-3
Michigan Manufacturing and Durable Goods Employment, 1972-1983
(Thousands)

Year	Manufacturing	Durable Goods	Lumber and Wood Products	Furniture and Fixtures	Primary Metal Products	Fabricated Metal Products	Non-electrical Machinery	Electrical Machinery	Motor Vehicles and Equipment	Other Transportation Equipment	Other Durable Goods
1972	1,097.4	879.5	15.2	20.8	86.9	147.0	140.2	42.3	359.6	15.4	42.0
1973	1,178.8	953.1	16.1	22.5	94.6	156.9	155.6	47.1	401.0	15.9	43.2
1974	1,114.0	897.2	15.5	21.9	92.7	141.6	158.1	45.4	366.1	12.7	43.2
1975	983.7	778.2	12.8	18.6	78.1	120.4	136.6	38.2	321.2	13.1	39.2
1976	1,061.7	845.4	14.1	19.6	84.5	137.3	138.0	39.6	357.7	14.6	40.0
1977	1,128.4	905.9	14.4	20.0	89.6	145.7	150.6	40.9	386.5	15.6	42.6
1978	1,179.6	952.8	14.4	21.5	90.0	155.6	159.8	42.7	409.6	15.8	43.4
1979	1,160.1	935.1	14.1	23.0	85.5	150.8	167.2	41.9	392.7	15.5	44.4
1980	998.9	795.0	11.6	23.0	67.3	118.0	158.4	34.9	326.3	13.9	41.6
1981	979.0	778.1	10.5	23.0	65.0	117.5	154.8	33.0	319.4	15.5	39.4
1982	876.9	684.5	9.7	21.6	51.1	101.7	132.1	30.4	286.5	16.2	35.2
1983	880.8	687.8	10.5	21.6	50.5	102.6	116.6	29.9	303.2	17.8	35.1
1982: January	895.3	704.2	9.1	22.0	53.3	104.5	146.1	30.2	288.0	15.6	35.5
February	895.3	704.3	9.2	21.9	52.8	103.9	144.9	30.2	290.4	15.7	35.2
March	900.2	709.7	9.0	21.7	53.6	104.8	142.8	30.2	296.4	15.7	35.4
April	881.4	692.2	9.5	21.7	53.3	103.0	139.8	30.3	283.2	16.4	35.2
May	898.2	706.1	9.9	21.6	53.3	105.4	138.0	30.8	295.3	16.6	35.3
June	902.5	707.4	10.2	21.8	53.2	106.3	135.0	32.0	297.2	16.7	35.3
July	887.7	692.1	10.0	21.1	52.0	103.2	130.4	31.7	292.1	16.5	35.1
August	874.4	677.9	10.0	21.5	51.2	103.2	127.2	30.6	284.6	16.3	35.6
September	884.9	688.4	10.0	21.8	51.8	101.0	126.1	30.3	293.6	16.3	35.8
October	843.2	651.4	10.0	21.5	48.3	102.5	120.6	29.5	273.3	16.2	38.5
November	830.7	641.1	10.0	21.5	46.5	96.8	117.1	29.4	270.7	16.3	34.7
December	528.6	639.1	9.7	21.7	44.1	94.4	116.8	29.5	273.0	16.4	34.5
1983: January	833.7	646.8	9.7	21.5	47.1	95.3	115.9	29.7	277.9	16.6	33.1
February	843.9	657.1	9.7	20.5	48.0	98.4	116.6	29.8	284.3	16.9	32.9
March	849.3	661.4	9.6	20.2	48.7	98.7	116.3	30.1	286.9	17.5	33.4
April	862.7	673.5	9.9	20.1	50.6	99.2	115.2	30.8	296.4	17.3	34.0
May	869.8	679.5	10.1	20.3	51.0	100.4	115.4	30.3	299.2	17.6	35.2
June	875.0	680.7	10.4	21.0	50.7	101.3	115.6	30.7	297.6	17.9	35.5
July	872.4	679.0	10.4	21.2	50.1	99.7	115.0	30.5	298.9	18.1	35.1
August	871.6	674.7	11.1	21.8	49.7	102.2	113.9	27.7	295.0	18.0	35.3
September	914.0	715.6	11.3	22.9	52.1	106.9	117.7	31.0	319.6	18.1	36.0
October	920.1	723.0	11.2	23.1	52.4	108.0	116.9	31.7	324.8	18.4	36.5
November	924.5	727.4	11.2	23.4	52.7	108.8	119.4	28.3	327.8	18.4	37.4
December	932.3	735.0	11.1	23.3	53.4	111.4	121.9	28.5	330.1	18.5	36.8

Source: Michigan Employment Security Commission.

Table B-4

Michigan Manufacturing and Nondurable Goods Employment, 1974-1983
(Thousands)

	Total	Total Manufacturing	Total Nondurable Goods Manufacturing	Food & Kindred Products	Textile Mill Products & Apparel	Paper & Allied Products	Printing, Publishing & Allied	Chemicals, Petroleum & Related	Other Nondurable Goods
1974		1,114.0	216.8	51.8	24.7	26.3	35.5	44.4	34.1
1975		983.7	205.5	51.5	22.2	23.5	34.6	45.9	27.8
1976		1,061.7	216.3	51.3	25.9	24.6	33.7	48.1	32.7
1977		1,128.4	222.5	51.9	27.3	24.4	32.3	49.7	36.9
1978		1,179.6	226.8	52.4	27.7	23.7	33.6	48.7	40.7
1979		1,160.1	225.0	52.1	25.8	23.8	34.1	47.8	41.4
1980		998.9	203.9	48.8	19.2	21.6	33.2	47.5	33.6
1981		979.0	200.9	46.9	19.3	21.7	35.2	46.6	33.2
1982		876.9	192.4	46.1	17.3	20.4	32.7	41.7	30.9
1983		880.9	193.0	45.1	19.0	20.1	33.0	42.8	33.0
1982:	January	895.3	191.0	45.1	16.1	21.3	32.7	42.9	29.8
	February	895.3	191.1	44.9	16.5	20.9	32.6	42.8	30.2
	March	900.2	190.5	43.8	17.0	21.1	32.5	42.6	30.5
	April	881.4	189.2	43.5	16.9	20.5	32.3	42.3	30.6
	May	898.2	192.1	44.7	17.9	20.5	32.3	42.0	31.4
	June	902.5	195.1	46.7	18.2	20.5	32.5	42.0	31.9
	July	887.7	195.6	48.6	17.6	20.1	32.7	41.9	31.5
	August	874.4	196.5	49.6	17.6	19.9	32.7	41.7	31.5
	September	884.9	196.5	47.5	18.5	20.3	33.0	41.2	32.6
	October	843.2	191.8	47.1	17.1	19.8	32.9	40.6	31.0
	November	830.7	189.7	45.9	17.1	19.9	32.8	40.4	30.3
	December	828.6	189.5	45.7	17.3	20.0	33.0	40.4	29.9
1983:	January	833.7	186.9	43.7	17.0	20.0	32.8	43.2	30.2
	February	843.9	186.8	42.5	17.4	20.0	32.6	43.1	31.2
	March	849.3	187.9	42.8	17.6	20.0	32.9	42.9	31.7
	April	862.7	189.2	42.9	18.4	20.0	33.1	42.7	32.1
	May	869.8	190.3	43.3	18.7	19.9	32.9	42.8	32.7
	June	875.0	194.3	45.3	19.4	20.3	33.5	42.9	32.9
	July	872.4	193.4	47.1	18.5	20.0	32.9	43.1	31.8
	August	871.6	196.9	48.8	19.2	20.1	33.2	43.0	32.6
	September	914.0	198.4	47.3	20.2	20.2	33.3	42.9	34.5
	October	920.1	197.1	46.2	20.1	20.1	33.0	42.7	35.0
	November	924.5	197.3	46.0	20.6	20.5	32.6	42.4	35.0
	December	932.3	197.3	45.6	20.7	20.5	33.4	42.3	34.8

Source: Michigan Employment Security Commission.

Table B-5

Michigan Nonmanufacturing Employment, 1974-1983
(Thousands)

Year	Total Nonmanufacturing Industries	Construction	Transportation, Communications, & Utilities	Wholesale Trade	Retail Trade	Finance Real Estate, & Insurance	Services	Mining
1974	1,601.1	125.8	153.2	153.5	510.9	134.2	510.1	13.4
1975	1,569.8	106.3	144.8	146.9	509.6	134.0	514.4	13.8
1976	1,626.8	110.0	145.6	148.8	531.1	136.9	541.2	13.2
1977	1,717.3	122.8	150.8	151.8	557.1	142.2	580.5	12.1
1978	1,818.4	138.8	155.9	164.2	584.9	147.4	613.9	13.3
1979	1,855.9	139.5	160.6	170.4	590.9	154.5	626.8	13.2
1980	1,816.1	116.8	152.2	161.5	572.1	156.5	644.5	12.5
1981	1,786.9	106.8	147.9	157.9	556.8	155.0	649.6	12.9
1982	1,738.6	89.5	143.3	150.7	542.6	151.9	650.3	10.4
1983	1,729.6	85.9	136.7	147.8	542.8	151.2	656.5	8.7
1982: January	1,719.9	85.0	143.3	152.9	532.1	151.9	642.8	12.0
February	1,702.8	80.5	143.0	151.6	520.4	151.4	643.8	12.1
March	1,705.6	79.4	142.8	151.8	523.4	151.4	645.1	11.7
April	1,711.0	81.7	142.4	148.8	529.3	151.5	645.9	11.4
May	1,744.7	90.5	144.7	149.9	545.1	152.3	651.3	11.0
June	1,750.0	85.2	146.0	150.4	551.7	153.4	652.9	10.3
July	1,761.9	97.5	145.7	151.7	549.1	153.3	654.6	10.0
August	1,736.3	99.6	144.5	151.3	551.7	152.8	656.1	9.7
September	1,760.0	96.8	143.4	150.7	550.4	151.8	657.6	9.5
October	1,753.6	98.2	142.3	149.8	546.6	150.9	656.6	9.2
November	1,743.8	93.6	141.1	149.6	550.4	150.7	649.7	8.7
December	1,744.5	85.6	140.8	149.5	560.5	151.1	647.7	9.3
1983: January	1,689.9	74.9	137.0	146.7	530.6	149.5	642.6	8.6
February	1,683.6	71.9	136.7	146.3	522.0	149.8	648.8	8.1
March	1,693.5	73.1	137.2	146.9	526.7	149.8	651.6	8.2
April	1,699.8	76.7	137.2	143.9	532.9	149.6	651.1	8.4
May	1,725.2	85.0	138.8	143.4	544.9	151.0	653.3	8.8
June	1,745.1	91.3	140.0	145.1	549.4	152.4	657.8	9.1
July	1,750.0	94.3	139.6	147.6	547.3	152.9	659.4	8.9
August	1,736.3	94.4	121.8	149.5	548.6	153.0	659.7	9.3
September	1,756.3	95.0	138.0	150.4	547.6	152.1	664.1	9.1
October	1,751.8	95.1	138.2	150.5	543.3	151.0	664.7	9.0
November	1,755.9	93.3	138.3	150.8	552.3	151.5	660.8	8.9
December	1,767.3	86.0	137.7	152.5	567.4	152.1	663.2	8.4

Source: Michigan Employment Security Commission.

Table B-6

Michigan Government Employment, 1970-1983
(Thousands)

Year	Total Government Employment	Federal Government	State Government	Local Government
1970	506.7	57.7	116.0	333.0
1971	509.5	54.9	117.8	336.8
1972	526.9	55.3	122.5	349.1
1973	534.4	55.0	123.9	355.5
1974	562.6	56.3	127.5	378.8
1975	583.1	56.1	132.6	394.4
1976	594.6	55.5	135.1	404.0
1977	596.8	54.7	136.9	405.2
1978	611.4	54.6	143.6	413.2
1979	621.0	56.7	147.7	416.6
1980	627.8	58.2	152.3	417.3
1981	598.4	55.9	147.8	394.7
1982	577.8	55.9	142.2	379.7
1983	576.0	55.5	141.1	379.4
1982: January	589.3	56.6	148.5	384.2
February	598.6	55.6	152.3	390.7
March	598.7	55.5	149.5	393.6
April	596.5	55.6	151.0	389.8
May	591.7	55.7	140.3	395.7
June	571.8	55.9	134.0	381.8
July	538.3	56.3	126.7	355.4
August	530.0	56.2	125.6	348.2
September	546.4	55.9	135.5	354.9
October	589.2	55.7	147.7	385.9
November	594.0	55.9	148.5	389.5
December	588.7	55.5	146.8	386.4
1983: January	574.7	55.3	143.5	375.9
February	586.1	55.2	146.0	384.9
March	586.8	55.5	144.5	386.8
April	582.9	55.5	146.0	381.4
May	586.9	56.0	139.4	391.5
June	570.2	56.6	134.4	379.2
July	559.5	56.1	132.7	370.7
August	554.5	55.8	132.8	365.9
September	570.5	54.8	141.0	374.7
October	382.8	54.9	147.0	380.9
November	582.5	54.9	146.4	381.2
December	574.2	55.5	139.4	379.3

Source: Michigan Employment Security Commission.

Table B-7

Michigan SMSA and County Employment and Unemployment Rates, 1982 and 1983

Area	1982 Number Employed	1982 Unemployment Rate	1983[1] Number Employed	1983[1] Unemployment Rate
Michigan	3,614,600	15.5	3,693,000	14.2
SMSA				
Ann Arbor-Ypsilanti	126,800	9.9	132,900	9.5
Battle Creek	68,500	16.1	68,400	14.5
Benton Harbor	59,100	16.3	60,400	15.5
Detroit	1,663,800	16.0	1,689,600	14.6
Flint	177,100	20.8	184,800	16.6
Grand Rapids	287,300	11.8	296,600	11.4
Jackson	55,300	16.3	55,200	15.7
Kalamazoo-Portage	121,900	11.0	124,300	10.9
Lansing-East Lansing	210,000	12.1	220,200	10.1
Muskegon-Muskegon Hgts.	64,900	17.7	63,600	17.0
Saginaw	82,100	17.1	84,500	14.0
Upper Peninsula	116,100	18.9	118,300	17.5
County				
Alcona	2,775	19.0	2,850	21.4
Alger	3,000	17.8	3,225	15.7
Allegan	31,300	15.0	32,500	14.4
Alpena	11,825	21.3	12,575	18.2
Antrim	5,650	21.3	5,850	18.5
Arenac	5,425	13.5	6,050	14.5
Baraga	2,600	21.8	2,550	21.5
Barry	16,750	16.5	16,725	13.6
Bay	44,200	16.0	44,200	16.4
Benzie	3,425	23.0	3,625	22.5
Berrien	59,100	16.3	60,400	15.5
Branch	16,150	15.7	16,300	13.3
Calhoun	51,750	16.0	51,725	14.7
Cass	17,550	14.7	20,075	11.7
Charlevoix	7,700	18.7	7,875	16.9
Cheboygan	7,850	22.1	7,875	24.5
Chippewa	9,925	23.4	10,025	22.3
Clare	8,025	15.7	8,700	15.7
Clinton	24,900	11.2	26,100	9.2
Crawford	3,450	18.3	3,750	18.0
Delta	15,300	18.0	14,650	19.1
Dickinson	10,825	14.8	11,525	11.9
Eaton	39,350	11.7	41,250	8.5
Emmett	11,950	14.2	11,975	14.8
Genesse	152,975	21.1	159,600	16.9
Gladwin	7,100	16.0	6,950	16.3
Gogebic	7,625	14.8	7,275	16.6
Grand Traverse	26,800	13.3	26,600	13.8
Gratiot	14,175	14.5	14,150	13.6
Hillsdale	18,050	14.3	18,300	12.1
Houghton	12,675	14.8	13,525	13.6
Huron	11,375	17.4	11,750	17.3
Ingham	122,725	11.9	128,625	10.4
Ionia	23,075	14.5	24,200	12.2

Table B-7 (continued)
Michigan SMSA and County Employment and Unemployment Rates, 1982 and 1983

Area	1982 Number Employed	1982 Unemployment Rate	1983[1] Number Employed	1983[1] Unemployment Rate
Iosco	8,075	15.2	8,300	15.9
Iron	5,500	15.4	6,050	12.6
Isabella	26,675	8.4	28,000	9.2
Jackson	55,300	16.3	55,200	15.7
Kalamazoo	92,700	10.6	94,550	10.0
Kalkaska	5,350	13.0	5,300	16.5
Kent	212,275	12.2	219,125	11.8
Keweenaw	800	18.8	700	20.0
Lake	2,675	15.1	2,575	15.6
Lapeer	26,850	16.7	27,175	13.9
Leelanau	6,850	13.8	6,800	15.5
Lenawee	31,825	18.1	33,125	15.7
Livingston	38,450	16.8	38,925	15.6
Luce	2,350	17.5	2,300	17.1
Mackinac	5,875	22.2	6,400	23.6
Macomb	266,225	17.6	269,575	16.0
Manistee	7,600	19.1	8,000	17.3
Marquette	24,075	22.5	24,950	16.8
Mason	9,950	19.1	10,300	18.3
Mecosta	12,500	11.8	13,575	12.3
Menominee	9,550	15.3	9,625	16.7
Midland	26,125	12.6	25,650	14.1
Missaukee	3,650	17.5	3,625	19.0
Monroe	54,525	14.6	55,825	15.1
Montcalm	16,400	19.7	18,950	16.5
Montmorency	1,775	23.7	2,100	25.0
Muskegon	56,950	17.7	55,775	16.9
Newaygo	11,950	17.4	12,675	17.0
Oakland	387,800	15.0	392,675	13.8
Oceana	7,950	17.6	7,775	17.7
Ogemaw	6,100	17.3	7,250	16.7
Ontonagon	2,950	23.9	2,225	31.5
Osceola	7,175	16.1	7,200	16.3
Oscoda	1,950	19.6	1,950	22.0
Otsego	7,325	13.6	7,625	12.4
Ottawa	75,050	10.6	77,475	10.2
Presque Isle	3,750	24.6	3,400	24.4
Roscommon	5,075	18.1	5,225	18.0
Saginaw	82,100	23.5	84,500	14.0
St. Clair	53,200	16.0	53,875	15.6
St. Joseph	22,550	12.8	22,575	11.2
Sanilac	13,175	20.2	13,575	18.2
Schoolcraft	3,150	21.3	3,250	20.7
Shiawassee	24,150	19.3	25,200	14.4
Tuscola	19,800	16.7	19,500	16.8
Van Buren	29,175	12.2	29,750	13.5
Washtenaw	126,800	9.9	132,900	9.5
Wayne	896,050	15.8	907,325	14.5
Wexford	9,150	17.8	9,075	16.2

[1]11-month average.

Source: Michigan Employment Security Commission.

Table B-8

U.S. and Michigan Manufacturing Industries,
Average Weekly and Hourly Earnings, 1973-1983

Year	Michigan			United States		
	Average Weekly Earnings	Average Hourly Earnings	Real Average Weekly Earnings (1967 Dollars)	Average Weekly Earnings	Average Hourly Earnings	Real Average Weekly Earnings (1967 Dollars)
1973	$228.63	$ 5.27	$169.99	$166.46	$ 4.89	$124.76
1974	232.03	5.63	155.62	176.80	4.42	119.43
1975	250.76	6.15	156.43	190.79	4.83	117.56
1976	290.97	6.81	172.27	209.32	5.22	121.76
1977	326.27	7.54	180.86	228.90	5.68	125.00
1978	346.20	8.07	178.36	249.27	6.17	127.57
1979	359.72	8.73	164.41	269.34	6.70	123.71
1980	382.26	9.51	150.78	288.62	7.27	116.94
1981	426.27	10.53	153.83	318.00	7.99	116.74
1982	449.33	11.18	155.86	330.65	8.50	114.37
1983	494.02	11.62	166.62	354.48	8.84	118.79
1982: January	425.24	10.97	151.44	315.09	8.38	111.54
February	440.32	10.99	158.50	328.60	8.34	115.95
March	443.43	11.11	159.39	326.43	8.37	115.31
April	449.72	11.12	158.52	329.16	8.44	115.78
May	460.08	11.24	160.92	331.57	8.48	115.49
June	472.97	11.37	163.60	333.98	8.52	114.93
July	461.20	11.35	157.73	335.55	8.56	114.84
August	447.94	11.17	153.04	334.23	8.57	114.15
September	431.09	11.29	146.18	332.13	8.56	113.24
October	441.31	11.08	149.50	332.13	8.56	112.93
November	454.00	11.17	153.38	334.93	8.61	114.08
December	466.11	11.29	159.30	335.32	8.62	114.68
1983: January	468.59	11.40	160.15	344.60	8.68	117.57
February	472.71	11.41	161.72	343.39	8.76	117.12
March	476.28	11.41	162.87	345.63	8.75	117.80
April	488.02	11.52	165.41	352.08	8.78	119.15
May	483.84	11.50	164.07	351.60	8.79	118.34
June	493.49	11.63	166.38	353.68	8.82	118.64
July	489.86	11.64	164.16	355.77	8.85	118.87
August	482.99	11.47	161.64	356.25	8.84	118.63
September	511.00	11.75	170.79	361.90	8.87	119.91
October	508.70	11.76	170.59	362.96	8.94	119.95
November	520.19	11.88	173.45	365.48	9.00	120.58
December[1]	524.35	11.98	174.78	364.91	9.01	120.23

[1]Preliminary.

Source: Michigan Employment Security Commission.

Table B-9

Michigan Manufacturing Industries, Average Weekly Earnings, 1971-1983

Industry	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Manufacturing Industries	$188.19	$211.52	$228.63	$232.03	$250.76	$290.97	$326.27	$346.20	$359.72	$382.26	$426.27	$449.33	$494.02
Durable Goods	192.82	217.80	235.79	239.66	258.53	302.14	340.16	359.69	373.10	396.25	441.17	466.43	517.53
Basic Lumber Products	113.14	118.80	128.14	136.26	147.72	164.68	178.62	199.06	212.96	225.23	250.77	259.95	304.93
Furniture	147.70	159.34	164.55	175.78	181.16	198.62	222.20	238.90	251.50	268.09	299.50	313.44	372.67
Primary Metals	194.71	217.94	243.12	256.15	268.20	319.81	357.01	390.99	397.07	420.20	467.46	483.32	505.36
Fabricated Metals	183.62	204.50	221.19	222.41	240.64	285.85	324.34	334.09	337.88	360.42	399.63	419.33	481.47
Nonelectrical Machinery	189.10	216.19	238.46	247.48	253.01	279.47	319.50	348.29	381.82	403.07	443.58	457.29	479.21
Electrical Machinery	174.79	193.76	196.51	207.58	221.51	251.75	284.96	309.48	300.75	322.32	342.30	385.16	420.47
Transportation Equipment	208.21	237.67	255.55	255.99	284.17	334.89	378.11	394.14	409.09	438.45	486.92	522.75	588.29
Nondurable Goods	166.71	183.81	196.65	198.43	218.67	241.69	267.46	285.94	302.90	324.37	360.81	384.33	407.71
Food & Kindred Products	160.52	175.96	187.17	203.33	224.80	244.40	263.38	280.57	305.54	333.30	369.84	392.14	408.36
Textile Mill Prod.& Appar.	169.78	191.53	200.83	207.44	227.62	258.26	303.92	324.85	331.47	345.37	404.91	456.15	500.60
Paper	172.25	191.22	201.87	212.53	225.55	253.78	282.90	312.99	329.36	352.21	399.09	434.30	472.58
Printing & Publishing	168.75	191.52	189.39	197.48	212.99	231.08	248.78	267.20	285.82	298.98	327.72	335.31	335.59
Chemicals	184.90	201.31	210.16	218.89	247.68	276.98	313.47	338.56	355.32	372.54	404.74	422.20	457.38

Source: Michigan Employment Security Commission.

Table B-10

Michigan Manufacturing Industries, Average Weekly Hours, 1971-1983

Industry	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Manufacturing Industries	41.0	42.8	43.4	41.2	40.8	42.7	43.3	42.9	41.2	40.2	40.5	40.2	42.5
Durable Goods	41.0	42.8	43.9	41.4	40.9	43.0	43.7	43.3	41.4	40.2	40.4	40.1	42.8
Basic Lumber Products	39.0	38.9	39.2	38.4	38.6	39.3	39.5	39.1	38.6	38.0	40.4	37.9	41.8
Furniture	40.4	41.3	40.6	40.4	39.0	40.0	40.8	41.0	39.5	39.5	39.5	38.2	40.8
Primary Metals	41.0	42.5	43.9	42.2	40.3	42.5	43.8	43.8	41.4	39.4	39.7	39.5	41.4
Fabricated Metals	40.4	42.2	43.1	40.6	39.9	42.3	42.8	41.9	40.0	39.3	39.1	39.0	42.3
Nonelectrical Machinery	40.2	42.7	44.2	43.1	41.0	41.7	43.1	43.4	43.3	42.0	41.6	40.2	41.2
Electrical Machinery	42.2	43.0	42.6	41.7	40.6	42.0	43.0	42.9	40.5	40.8	39.8	39.8	41.9
Transportation Equipment	41.6	43.9	44.7	41.0	41.6	44.6	44.8	44.3	41.6	40.1	40.8	40.9	44.2
Nondurable Goods	40.9	41.7	41.2	40.3	40.3	41.1	41.7	41.5	40.5	40.3	40.7	40.5	41.5
Food & Kindred Products	40.7	41.4	41.0	41.4	41.7	41.8	41.9	41.2	41.3	41.6	41.5	41.4	41.4
Textile Mill Prod. & Appar.	40.1	42.0	41.7	39.7	39.6	40.8	42.1	41.5	38.8	38.4	38.9	40.5	42.4
Paper	44.2	45.3	44.9	44.0	43.5	44.4	45.3	45.2	43.4	43.0	44.2	43.6	44.5
Printing & Publishing	37.3	37.3	37.2	36.9	36.1	36.8	37.9	37.9	37.1	36.1	37.1	37.2	37.6
Chemicals	41.3	42.1	42.1	41.7	41.3	42.1	42.9	43.2	42.3	42.2	42.5	40.7	41.1

Source: Michigan Employment Security Commission.

Table B-11

Michigan Personal Income by Major Sources, 1974-1983
(Millions)

Source	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Wage & Salary Disbursements	$35,172	$35,462	$40,686	$46,176	$52,106	$56,943	$57,292	$60,436	$59,639	$ 62,540
Farm	126	116	126	138	146	167	235	208	246	275
Mining	175	200	205	211	251	285	287	329	256	236
Contract Construction	1,711	1,499	1,625	1,956	2,398	2,664	2,352	2,331	2,055	1,952
Manufacturing	14,823	14,157	17,430	20,384	22,860	24,326	22,788	24,242	22,533	24,053
Durable	12,350	11,644	14,516	17,097	19,265	20,446	18,903	20,102	18,318	19,580
Nondurable	2,473	2,513	2,914	3,287	3,595	3,880	3,885	4,140	4,215	4,473
Wholesale Trade	1,953	2,064	2,130	2,360	2,752	3,137	3,205	3,398	3,400	3,643
Retail Trade	3,332	3,466	3,825	4,207	4,695	5,059	5,178	5,339	5,340	5,440
Finan.,Insur.,& Real Est.	1,265	1,351	1,473	1,634	1,872	2,117	2,340	2,476	2,597	2,736
Trans., Comm.,& Utilities	1,953	1,988	2,249	2,509	2,876	3,192	3,265	3,446	3,501	3,420
Services	4,228	4,599	5,190	5,867	6,702	7,567	8,381	9,145	9,731	10,374
Government	5,452	5,965	6,365	6,837	7,461	8,325	9,150	9,405	9,860	10,281
Other Industries	53	57	68	76	93	105	111	117	121	130
Other Labor Income	3,449	3,785	4,471	5,369	6,127	6,750	7,085	7,711	7,720	8,480
Proprietors' Income	2,824	2,795	2,895	3,430	3,856	4,242	4,106	3,853	3,644	4,342
Farm	582	510	357	457	500	543	505	596	472	437
Nonfarm	2,242	2,285	2,538	2,973	3,356	3,699	3,601	3,258	3,172	3,905
Total Income/Place of Work	41,445	42,042	48,052	54,975	62,089	67,935	68,483	72,000	71,003	75,362
Less: Contrib./Soc. Ins.	2,080	2,121	2,383	2,572	2,934	3,328	3,359	3,841	3,876	4,110
Plus: Resid. Adjustment	204	229	285	326	375	431	448	483	492	519
Net Income/Place of Resid.	39,569	40,150	45,954	52,729	59,530	65,038	65,572	68,642	67,619	71,771
Plus: Dividends,Int.,Rent	6,198	6,554	7,240	8,129	9,376	10,828	12,315	15,053	16,333	16,655
Plus: Transfer Payments	5,973	7,836	8,130	8,432	8,871	10,117	13,477	14,196	15,796	16,538
Total Pers. Income/Resid.	$51,739	$54,540	$61,324	$69,291	$77,777	$85,983	$91,363	$97,891	$99,747	$104,963
Total Real Personal Income (1967 Dollars)	$34,701	$34,024	$36,308	$38,410	$40,071	$39,298	$36,041	$35,327	$34,598	$ 35,401

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table B-12

Michigan Personal Income by Major Sources, Quarterly, 1977-1982
(Millions, Seasonally Adjusted Annual Rate)

Source	1977				1978				1979			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Wage and Salary Disbursement	$43,614	$45,490	$47,373	$48,227	$49,622	$51,059	$52,867	$54,875	$57,007	$57,032	$ 57,033	$ 56,707
Farm	136	137	138	140	140	145	147	152	156	158	168	184
Mining	211	230	205	197	219	246	263	274	268	278	292	301
Contract Construction	1,720	1,938	2,056	2,110	2,266	2,358	2,460	2,509	2,575	2,676	2,723	2,681
Manufacturing	19,113	20,065	21,069	21,285	21,609	22,312	23,219	24,300	25,277	24,759	24,125	23,144
Durable	15,962	16,795	17,740	17,890	18,161	18,773	19,603	20,525	21,403	20,867	20,249	19,267
Nondurable	3,151	3,271	3,329	3,396	3,448	3,540	3,616	3,775	3,874	3,892	3,876	3,877
Wholesale Trade	2,219	2,327	2,433	2,459	2,608	2,692	2,802	2,905	3,029	3,122	3,187	3,209
Retail Trade	4,001	4,141	4,289	4,397	4,514	4,645	4,746	4,877	5,013	5,026	5,086	5,111
Finance, Insur.& Real Estate	1,560	1,613	1,661	1,702	1,773	1,837	1,899	1,981	2,048	2,085	2,152	2,183
Trans., Comm., & Utilities	2,356	2,463	2,580	2,635	2,775	2,860	2,891	2,978	3,134	3,148	3,205	3,283
Services	5,567	5,739	5,993	6,170	6,408	6,556	6,832	7,013	7,228	7,415	7,721	7,905
Government	6,662	6,763	6,872	7,050	7,229	7,313	7,512	7,790	8,179	8,264	8,259	8,598
Federal Civilian	862	858	884	925	959	985	990	1,027	1,038	1,033	1,026	1,059
Federal Military	202	199	174	183	181	179	180	185	183	182	185	195
State & Local	5,599	5,707	5,814	5,942	6,089	6,149	6,342	6,577	6,958	7,049	7,048	7,345
Other Industries	70	75	77	82	83	95	96	97	102	103	106	110
Other Labor Income	4,993	5,243	5,561	5,677	5,866	5,988	6,211	6,443	6,723	6,761	6,762	6,755
Proprietors' Income	3,247	3,354	3,475	3,646	3,684	3,835	3,946	3,958	4,066	4,245	4,331	4,327
Farm	436	425	429	537	503	500	526	470	520	613	534	504
Nonfarm	2,811	2,920	3,046	3,109	3,181	3,335	3,421	3,488	3,546	3,632	3,797	3,823
Total Income by Place of Work	51,873	54,087	56,409	57,550	59,172	60,882	63,024	65,276	67,796	68,038	68,115	67,789
Less: Contrib. for Social Ins.	2,464	2,546	2,630	2,647	2,832	2,886	2,967	3,050	3,365	3,344	3,319	3,282
Plus: Residence Adjustment	308	324	334	341	353	372	382	394	417	424	436	446
Total Income by Place of Resid.	49,697	51,865	54,112	55,244	56,693	58,367	60,439	62,620	64,849	65,118	65,232	64,952
Plus: Dividends, Int., Rent	7,801	7,993	8,256	8,464	8,788	9,121	9,574	10,019	10,375	10,571	10,956	11,409
Plus: Transfer Payments	8,349	8,311	8,490	8,579	8,677	8,779	8,951	9,080	9,248	9,506	10,470	11,246
Total Pers. Income by Residence	$65,847	$68,169	$70,858	$72,286	$74,159	$76,266	$78,963	$81,719	$84,471	$85,195	$86,657	$87,607

Table B-12 (continued)

Michigan Personal Income by Major Sources, Quarterly, 1977-1982
(Millions, Seasonally Adjusted Annual Rate)

Source	1980				1981				1982			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Wage & Salary Disbursements	$57,632	$55,962	$56,370	$59,202	$59,763	$60,952	$60,759	$60,270	$59,223	$60,009	$ 60,396	$ 58,929
Farm	236	240	238	228	215	206	203	208	223	239	255	265
Mining	302	296	263	289	306	325	353	332	316	262	225	223
Contract Construction	2,570	2,330	2,203	2,306	2,312	2,381	2,346	2,285	2,238	2,044	1,970	1,968
Manufacturing	23,490	21,809	21,845	24,007	24,109	24,813	24,660	23,383	22,640	23,073	23,145	21,273
Durable	19,611	18,003	18,008	19,988	20,049	20,646	20,477	19,234	18,475	18,839	18,876	17,081
Nondurable	3,880	3,806	3,837	4,019	4,060	4,168	4,183	4,149	4,165	4,234	4,268	4,192
Wholesale Trade	3,228	3,177	3,165	3,249	3,318	3,390	3,465	3,419	3,362	3,397	3,448	3,391
Retail Trade	5,189	5,065	5,157	5,302	5,288	5,369	5,410	5,291	5,216	5,342	5,408	5,396
Finance, Ins.,& Real Estate	2,291	2,323	2,348	2,399	2,414	2,446	2,491	2,554	2,470	2,588	2,660	2,671
Trans., Comm.,& Utilities	3,210	3,216	3,249	3,386	3,358	3,466	3,485	3,475	3,500	3,535	3,515	3,455
Services	8,214	8,288	8,393	8,628	8,966	9,040	9,183	9,392	9,427	9,560	9,953	9,986
Government	8,797	9,108	9,397	9,296	9,354	9,401	9,049	9,814	9,714	9,850	9,697	10,178
Federal Civilian	1,082	1,135	1,134	1,194	1,213	1,201	1,220	1,244	1,240	1,261	1,282	1,287
Federal Military	194	197	199	221	223	224	226	257	256	259	261	270
State & Local	7,521	7,777	8,063	7,882	7,919	7,977	7,603	8,312	8,218	8,331	8,154	8,621
Other Industries	108	111	114	112	122	114	114	118	116	119	120	124
Other Labor Income	7,111	6,872	6,956	7,400	7,518	7,790	7,819	7,715	7,617	7,768	7,885	7,608
Proprietors' Income	4,338	3,970	4,045	4,070	4,004	3,837	3,873	3,699	3,645	3,535	3,498	3,899
Farm	491	417	531	579	513	565	686	619	616	355	311	606
Nonfarm	3,847	3,553	3,513	3,491	3,491	3,273	3,187	3,080	3,028	3,180	3,186	3,293
Total Income by Place of Work	69,083	66,804	67,371	70,673	71,284	72,579	72,450	71,684	70,484	71,313	71,779	70,435
Less: Contrib. for Soc. Ins.	3,402	3,258	3,311	3,466	3,796	3,871	3,860	3,835	3,872	3,902	3,919	3,811
Plus: Residence Adjustment	441	446	445	460	471	478	492	491	487	449	493	494
Net Income by Place of Resid.	66,122	63,992	64,504	67,667	67,960	69,186	69,082	68,340	67,099	67,905	68,352	67,118
Plus: Dividends, Int., Rent	11,780	12,186	12,368	12,927	13,862	14,602	15,788	15,959	16,101	16,457	16,342	16,430
Plus: Transfer Payments	12,552	13,178	14,237	13,940	13,890	13,845	14,358	14,692	14,893	15,341	15,752	17,198
Total Pers. Income by Residence	$90,454	$89,355	$91,109	$94,533	$95,712	$97,633	$99,228	$98,991	$98,094	$99,703	$100,446	$100,746

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table B-13

U.S. and Major Industrial States
Personal Income and Real Per Capita Personal Income, 1979-1982

State	Personal Income (Millions)				Real Personal Income (Millions of 1967 Dollars)				Real Per Capita Personal Income (1967 Dollars)			
	1979	1980	1981	1982	1979	1980	1981	1982	1979	1980	1981	1982
U.S.	$1,943,983	$2,158,685	$2,426,893	$2,571,517	$894,196	$874,670	$890,930	$889,490	$3,982	$3,850	$3,885	$3,842
Michigan	85,983	91,360	97,891	99,747	39,298	36,041	35,327	34,598	4,249	3,894	3,834	3,798
California	229,272	259,578	292,107	310,698	106,687	104,352	105,455	105,285	4,588	4,390	4,355	4,258
Florida	77,673	90,856	105,918	114,356	35,729	36,813	38,883	39,555	3,773	3,728	3,832	3,798
Illinois	112,019	119,709	132,917	138,460	52,199	48,761	49,412	48,260	4,570	4,265	4,317	4,215
Indiana	46,141	48,827	53,491	54,840	21,050	19,546	19,767	18,832	3,845	3,561	3,603	3,442
Mass.	51,532	57,940	64,964	69,924	24,205	24,141	24,358	25,261	4,212	4,204	4,218	4,370
New Jersey	72,196	80,964	90,766	97,600	33,879	34,133	34,844	35,607	4,595	4,627	4,696	4,787
New York	162,474	180,719	201,884	217,231	76,566	76,447	77,917	79,253	4,342	4,350	4,428	4,487
Ohio	94,334	101,849	110,896	115,087	41,239	40,177	40,224	38,581	3,819	3,720	3,727	3,575
Penn.	101,366	111,543	123,756	129,956	47,037	45,659	45,734	45,775	3,961	3,843	3,852	3,858
Texas	118,658	136,597	161,297	174,528	52,227	52,436	55,928	57,467	3,761	3,661	3,798	3,761
Wisconsin	40,483	44,197	48,479	51,034	18,502	17,573	17,308	17,045	3,965	3,716	3,651	3,577

Source: Compiled by the Michigan Department of Management and Budget based on data from the U.S. Department of Commerce, Bureau of Economic Analysis, and the U.S. Department of Labor, Bureau of Labor Statistics.

Table B-14
U.S. Consumer Price Index—All Urban Consumers, 1983
(1967=100)

Group	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average	Percent Change 1982-83
All Items	293.1	293.2	293.4	295.5	297.1	298.1	299.3	300.3	302.6	301.8	303.1	303.5	298.4	3.2
Food and Beverages	280.7	281.6	283.2	284.6	285.0	284.7	284.7	284.9	285.7	285.3	285.3	286.5	284.4	2.2
Food	288.1	289.0	290.5	291.9	292.4	292.0	292.0	292.2	292.9	292.6	292.5	293.9	291.7	2.1
Food at home	279.3	280.3	281.9	283.4	283.8	283.0	282.8	282.5	282.3	282.5	281.4	283.0	282.2	1.1
Cereals & bakery products	287.8	288.7	289.8	291.1	291.7	292.4	293.7	294.0	294.0	293.7	295.7	297.1	292.5	3.2
Meats-poultry-fish-eggs	263.0	264.0	264.2	264.2	263.8	261.5	260.4	258.8	257.1	258.7	256.6	259.3	261.0	- 0.4
Dairy products	249.5	249.7	249.6	250.1	250.3	249.8	249.8	250.2	250.1	250.2	250.2	249.9	250.0	1.2
Fruits & vegetables	276.2	278.1	286.9	294.9	298.2	298.2	298.7	299.4	296.7	297.6	288.9	292.6	292.2	0.3
Food away from home	314.5	315.2	316.5	318.0	318.6	319.3	319.8	321.0	323.9	322.2	324.8	325.5	319.9	4.4
Alcoholic Beverages	211.6	213.3	215.1	216.1	216.6	217.0	217.2	217.1	218.9	218.4	218.6	218.1	216.5	3.8
Housing	317.9	318.5	318.6	320.3	321.8	323.1	324.5	324.8	326.8	326.4	327.0	327.4	323.1	2.7
Shelter	338.3	339.2	339.3	341.7	342.7	343.6	345.3	346.6	349.8	348.5	351.1	351.1	344.8	2.3
Rent, residential	232.2	233.1	233.6	234.5	235.1	235.9	237.1	238.2	240.4	239.5	241.3	242.0	236.9	5.8
Other rental costs	339.2	340.8	340.6	343.7	347.5	347.9	352.3	355.8	362.0	361.3	359.8	356.1	350.6	6.7
Homeowners' Costs[1]	100.7	100.9	100.9	101.7	102.0	102.2	102.7	103.0	103.9	103.5	104.3	104.5	102.5	4.5
Fuel & Other Utilities	365.4	364.6	363.8	363.6	369.3	373.6	375.5	375.1	374.4	376.4	371.3	370.6	370.3	5.6
Fuels	463.5	461.5	459.7	468.3	468.3	475.2	477.7	476.5	474.4	478.3	468.1	467.4	469.2	5.2
Oil, coal & bottle gas	671.1	654.0	625.3	621.0	621.0	620.0	619.3	619.0	624.7	623.2	623.9	623.9	628.0	- 6.0
Gas (piped) & electricity	412.5	414.5	418.0	429.1	429.1	437.4	440.5	439.1	435.6	440.5	428.2	427.5	428.7	8.9
Household Furnishings & Opera.	235.8	236.7	237.6	238.4	238.4	238.6	238.9	238.0	239.4	238.9	239.9	240.5	213.7	6.7
Apparel and Upkeep	191.0	192.0	194.5	196.1	196.1	195.6	195.0	197.3	200.7	200.4	200.7	199.3	196.5	2.5
Apparel Commodities	179.2	180.2	182.8	184.2	184.2	183.6	182.8	185.3	188.7	188.5	188.6	186.9	184.5	1.9
Men's and boys'	184.9	184.4	186.7	189.5	189.5	189.1	188.2	188.3	192.1	190.8	193.0	191.8	183.9	2.7
Women's and girls'	153.9	155.7	160.0	160.1	160.1	159.7	158.8	164.2	168.6	168.9	167.0	164.9	161.9	1.8
Footwear	204.8	205.6	206.6	208.0	208.0	206.8	205.8	205.7	208.6	208.0	209.1	207.9	206.9	0.7
Transportation	293.0	289.9	287.4	296.2	296.2	298.3	300.4	302.4	305.0	303.7	306.3	306.3	298.4	2.4
Private	288.4	285.2	282.7	291.7	291.7	293.8	296.0	298.0	300.4	299.2	301.7	301.8	293.9	2.2
Public	357.7	355.2	354.5	359.2	359.2	361.2	363.2	365.0	368.2	366.6	370.3	369.0	362.6	4.8
Medical Care	347.8	351.3	352.3	354.3	354.3	355.4	357.7	360.0	362.9	361.2	364.9	366.2	357.3	8.7
Entertainment	241.5	243.1	244.6	244.8	244.8	245.4	246.0	246.6	249.1	247.5	249.5	249.5	246.0	4.3
Other Goods & Services	256.1	281.6	281.9	283.6	283.6	284.5	287.5	289.0	296.8	294.4	298.1	298.6	288.3	10.9
Commodities	267.2	266.7	266.7	270.9	270.9	271.6	272.5	273.4	275.0	274.5	275.2	275.5	271.5	2.9
Commodities less Food	254.4	253.2	252.4	255.4	257.6	258.9	260.2	261.4	263.6	262.9	264.1	263.8	259.0	8.5

[1]December 1982=100, December to December percentage change.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table B-15
Detroit Consumer Price Index—All Urban Consumers, 1983
(1967=100)

Group	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average	Percent Change 1982-83
All Items	292.0	292.3	292.4	294.9	294.9	296.6	298.4	298.8	299.2	298.2	299.9	300.1	296.5	2.8
Food and Beverages	271.3	272.3	274.1	273.9	272.6	271.8	270.8	270.1	267.6	264.1	265.1	266.5	270.0	- 0.1
Food	275.3	276.5	278.4	278.0	276.4	275.7	274.5	273.7	270.9	267.2	268.3	270.0	273.7	- 0.2
Food at home	277.7	279.5	282.2	281.7	280.3	279.7	277.7	276.4	271.8	265.5	267.0	268.3	275.6	- 0.7
Cereals & bakery products	299.0	297.6	297.0	303.0	300.7	304.4	300.3	299.4	300.6	294.6	295.9	297.7	299.4	2.7
Meat-poultry-fish-eggs	263.9	267.8	268.5	265.2	264.7	260.9	262.7	262.2	254.7	254.4	253.3	251.9	260.8	- 1.1
Dairy products	261.8	263.3	267.9	266.5	222.2	261.8	256.6	252.4	245.5	228.5	236.3	239.1	253.5	- 1.7
Fruits & vegetables	247.7	252.6	259.5	261.6	263.3	263.9	260.3	261.3	257.7	247.6	250.6	252.5	256.6	- 3.3
Food away from home	281.0	280.6	280.6	280.6	278.5	277.5	278.3	278.5	280.1	282.2	282.2	285.1	280.4	- 0.8
Alcoholic Beverages	243.0	242.5	243.5	244.5	247.3	246.6	246.4	247.7	248.5	247.7	247.7	246.3	246.0	- 1.9
Housing	321.5	320.7	320.6	327.3	324.9	331.2	333.2	331.0	330.6	329.7	331.1	331.1	327.7	4.3
Shelter	349.5	349.1	346.6	348.7	344.0	346.1	349.0	350.8	351.6	352.8	351.2	352.5	349.3	2.9
Rent, residential	218.4	218.6	218.9	219.5	218.3	218.4	220.1	221.1	221.0	222.1	222.8	223.0	220.2	2.8
Other rental costs	314.8	312.3	312.3	312.5	308.3	308.7	301.9	302.8	318.7	325.4	320.4	310.0	312.3	9.4
Homeowner's costs[1]	101.0	100.8	100.1	100.6	98.9	99.7	100.9	101.6	101.6	101.3	101.5	100.9	101.6	1.6
Fuel & Other Utilities	377.9	376.9	375.2	401.0	401.2	425.6	429.3	412.6	410.5	403.8	410.4	406.3	402.6	9.7
Fuels	451.2	449.7	446.5	486.4	486.7	520.2	523.7	497.9	494.7	476.9	488.0	494.2	484.7	10.2
Oil, coal & bottle gas	690.6	674.7	640.8	634.0	637.3	637.4	639.4	641.1	648.8	650.8	657.1	657.7	650.3	7.9
Gas (piped) & electricity	422.3	422.3	422.3	466.8	466.8	503.5	507.1	478.6	474.3	454.7	466.2	473.5	463.2	13.3
Household Furnishings & Opera.	213.8	212.8	217.2	217.9	217.6	218.1	217.7	218.9	217.7	217.4	219.8	220.7	217.5	2.0
Apparel & Upkeep	158.7	163.7	163.4	164.6	166.9	164.0	164.8	170.1	173.9	172.1	172.1	165.0	166.6	2.7
Apparel Commodities	144.2	149.6	149.1	149.8	152.3	149.2	149.8	155.5	159.2	157.2	157.2	149.4	151.9	2.2
Men's and boys'	162.0	162.1	157.2	149.8	155.6	150.1	147.1	156.9	172.0	173.9	174.4	168.2	160.8	- 1.3
Women's and girls'	125.5	130.6	133.9	142.0	142.2	142.0	146.7	150.9	148.5	144.7	147.3	137.3	141.0	6.5
Footwear	150.7	158.7	156.5	156.9	156.0	157.0	153.9	157.2	158.8	158.4	158.4	149.7	156.0	- 0.8
Transportation	290.2	287.3	286.5	287.4	291.0	290.6	294.2	296.9	298.8	298.9	301.7	301.1	293.7	0.7
Private	288.6	285.6	284.7	285.4	289.2	288.7	291.5	294.3	296.2	296.1	298.8	298.2	291.4	0.2
Public	328.9	329.1	329.3	336.5	332.3	337.7	359.1	358.3	360.5	366.8	369.3	369.0	348.1	12.0
Medical Care	357.7	357.3	359.6	359.5	358.5	357.9	364.0	367.5	367.5	369.5	276.1	390.7	365.5	5.5
Entertainment	222.1	223.0	220.8	220.0	219.3	220.8	221.5	222.7	220.6	222.6	221.8	221.5	221.4	4.3
Other Goods & Services	281.2	280.5	281.6	282.6	283.9	284.2	285.5	284.2	290.3	290.2	291.6	292.6	285.7	11.1
Commodities	254.4	254.2	254.6	256.4	257.3	257.4	258.1	259.2	259.6	258.3	259.4	259.1	257.3	2.5
Commodities less Food & Bev.	241.6	240.8	240.8	243.3	245.3	245.8	247.3	249.3	251.2	251.0	252.1	250.9	246.6	3.7

[1]December 1982-100, December to December percentage change.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table B-16

U.S. and Detroit Consumer Price Indices, 1970-1983
(Annual Average)

Group	1970		1971		1972		1973		1974		1975		1976	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All Items	116.3	117.4	121.3	121.7	125.3	126.4	133.1	134.5	147.7	149.1	161.2	160.3	170.5	168.9
Food	114.9	115.2	118.4	117.3	123.5	122.9	141.4	143.6	161.7	164.1	175.4	171.6	180.8	176.5
Food at home	113.7	115.4	116.4	116.1	121.6	121.6	141.4	144.8	162.4	165.3	175.8	171.1	179.5	173.3
Cereals & bakery products	108.9	110.9	113.9	114.5	114.7	115.8	127.7	134.5	166.1	182.1	184.8	189.8	180.6	184.5
Meat-poultry-fish-eggs	116.5	121.1	116.9	119.1	128.0	131.2	160.4	166.5	163.9	167.4	178.0	172.2	179.4	172.4
Dairy products	111.8	113.6	115.3	113.4	117.1	114.7	127.9	127.5	151.9	154.9	156.6	158.8	169.3	167.3
Fruits & vegetables	113.4	110.9	119.1	114.9	125.0	118.4	142.5	135.6	165.8	158.9	171.0	157.4	175.4	158.9
Other foods at home[1]	114.1	113.1	115.9	114.4	116.7	116.1	130.3	132.5	162.8	164.2	185.6	177.9	189.9	184.5
Food away from home	119.9	115.0	126.1	123.3	131.1	128.6	141.4	138.8	159.4	159.2	174.3	174.1	186.1	186.4
Housing	118.9	124.2	124.3	128.3	129.2	133.3	135.0	137.4	150.6	151.0	166.7	163.8	177.2	173.2
Shelter	123.6	133.2	128.8	137.3	134.4	143.1	140.7	147.4	154.3	159.5	169.7	170.3	179.0	177.2
Rent	110.1	111.5	115.2	116.6	119.0	120.4	124.2	124.4	130.2	129.8	137.3	136.1	145.4	142.1
Homeownership	128.5	137.6	133.7	141.4	140.1	147.7	146.7	152.1	163.2	165.5	181.7	177.2	191.7	184.3
Fuel & utilities	107.6	104.6	115.1	110.7	120.2	115.4	126.9	121.2	150.2	142.3	167.8	161.6	182.7	182.8
Fuel oil & coal	110.1	109.8	117.5	113.7	118.5	113.9	136.0	129.3	214.6	208.7	235.3	226.7	250.8	248.6
Gas & electricity	107.3	103.3	114.7	111.3	120.5	116.9	126.4	123.1	145.8	144.4	169.6	171.1	188.9	197.7
Household furnishings & opera.	113.4	109.4	118.1	112.6	121.0	115.1	124.9	117.3	140.5	130.5	158.1	145.0	168.5	156.6
Apparel & Upkeep	116.1	112.0	119.8	115.5	122.3	118.3	127.1	122.3	136.2	132.4	142.3	137.9	147.6	142.0
Men's & boys'	117.1	116.7	120.3	117.3	121.9	117.3	126.4	121.8	136.4	135.7	142.2	144.5	147.2	151.5
Women's & girls'	116.0	104.6	120.1	111.2	123.0	115.4	127.3	117.4	134.9	123.2	138.1	126.5	141.9	128.1
Footwear	117.7	118.5	121.5	120.7	124.9	124.8	130.2	132.6	138.1	144.6	144.2	146.9	149.9	147.2
Transportation	112.7	109.9	118.6	114.6	120.0	116.5	123.8	123.6	137.7	138.7	150.6	149.1	165.5	160.2
Private	111.1	108.5	116.1	111.8	117.5	113.9	121.5	121.3	136.6	137.2	149.8	148.0	164.6	159.5
Public	128.5	126.1	137.7	148.4	143.4	148.5	144.8	150.8	148.0	156.1	158.6	160.8	174.2	168.6
Medical Care	120.6	124.4	128.4	134.1	132.5	141.4	137.7	148.4	150.5	162.8	168.6	187.4	184.7	209.1

Table B-16 (continued)

U.S. and Detroit Consumer Price Indices, 1970-1983
(Annual Averages)

Group	1977		1978		1979		1980		1981		1982		1983	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All Items	181.5	180.4	195.4	194.1	217.4	218.8	246.8	253.5	272.4	277.1	289.1	288.3	298.4	296.5
Food	192.2	186.0	211.4	205.5	234.5	226.5	254.6	245.2	274.6	264.2	285.7	274.3	291.7	273.7
Food at home	190.2	183.5	210.2	203.5	232.9	225.8	251.5	246.1	269.9	265.2	279.2	277.5	282.2	275.6
Cereals & bakery products	183.5	193.7	199.9	208.9	220.1	229.2	246.4	254.8	271.1	276.6	283.4	291.5	292.5	299.4
Meats-poultry-fish-eggs	178.4	171.9	204.3	196.9	234.2	225.9	242.2	235.5	252.8	250.8	262.1	263.8	261.0	260.8
Dairy products	173.9	173.9	185.6	188.9	207.1	221.2	227.4	242.3	243.6	252.5	247.0	257.8	250.0	253.5
Fruits & vegetables	191.6	171.0	212.9	192.3	230.0	202.6	246.7	220.6	276.3	250.9	291.4	265.3	292.2	256.6
Other foods at home[1]	224.1	215.3	n.a.	244.2	n.a.	258.9	n.a.	295.8	n.a.	320.3	n.a.	334.3	n.a.	334.4
Food away from home	200.3	199.2	218.4	218.7	242.9	237.4	267.0	253.0	291.0	272.7	306.5	278.1	319.9	280.4
Housing	189.6	184.6	202.8	196.7	227.6	229.4	263.3	278.9	293.5	304.6	314.7	314.2	323.1	327.7
Shelter	191.1	188.0	210.4	204.0	239.7	234.2	281.7	309.8	314.7	334.2	337.0	339.5	344.8	349.3
Rent	153.5	150.8	164.0	162.6	176.0	176.5	191.6	194.1	208.2	206.1	224.0	214.3	236.9	220.2
Homeowner's costs[2]	204.9	195.4	227.2	212.2	262.4	258.9	314.0	332.8	352.7	359.7	376.8	363.9	102.5	101.6
Fuel & utilities	202.2	205.7	216.0	224.4	239.3	249.6	278.6	286.8	319.2	333.6	350.8	366.9	370.3	402.6
Fuel oil & coal	283.4	285.7	298.3	305.3	403.1	423.0	556.0	579.0	675.9	711.7	667.9	701.7	628.0	650.3
Gas & electricity	213.4	223.0	232.6	247.0	257.8	277.3	301.8	319.7	345.9	366.8	393.8	408.9	428.7	463.2
Household, furnishings & opera.	177.0	160.5	177.7	161.6	190.3	174.7	205.4	188.5	221.3	205.5	233.2	213.3	213.7	217.5
Apparel & Upkeep	154.2	146.7	159.6	148.1	166.6	148.1	178.4	155.6	186.9	159.1	191.8	162.2	196.5	166.6
Men's & boys'	154.0	154.3	157.3	152.1	160.8	150.2	168.4	149.5	177.5	159.2	183.9	163.0	183.9	160.8
Women's & girls'	146.4	130.9	149.3	133.1	151.9	129.2	155.1	138.5	157.5	135.5	159.1	132.4	161.9	141.0
Footwear	156.9	150.8	163.8	147.5	176.7	156.6	190.3	161.7	200.4	157.0	205.5	157.3	206.9	156.0
Transportation	177.3	174.7	185.5	184.9	212.0	210.0	249.7	246.8	280.0	279.7	291.5	291.8	298.4	293.7
Private	176.7	174.8	185.0	184.5	212.3	210.1	249.2	246.5	277.5	278.8	287.5	290.9	293.9	291.4
Public	182.4	172.6	188.7	192.8	200.3	207.3	251.6	253.9	312.0	298.6	346.0	310.9	362.6	348.1
Medical Care	202.4	234.8	219.4	251.8	239.7	274.5	265.9	297.7	294.5	320.1	328.7	346.4	357.3	365.5

[1]Due to revisions made in the U.S. Consumer Price Index in 1978, the other foods at home category has been changed and is not comparable to previous years.

[2]Index changed to rent equivalent—December 1982=100.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table B-17

U.S. and Detroit Consumer Price Indices
and Inflation Rates, 1953-1983

Year	U.S.		Detroit	
	Index	Percent Change	Index	Percent Change
1953	80.1	0.8	82.0	1.6
1954	80.5	0.5	82.3	0.4
1955	80.2	- 0.4	82.2	- 0.1
1956	81.4	1.5	83.8	1.9
1957	84.3	3.6	86.2	2.9
1958	86.6	2.7	87.5	1.5
1959	87.3	0.8	87.4	- 0.1
1960	88.7	1.6	88.2	0.9
1961	89.6	1.0	88.7	0.7
1962	90.6	1.1	88.9	0.2
1963	91.7	1.2	89.8	1.0
1964	92.9	1.3	90.5	0.8
1965	94.5	1.7	92.6	2.3
1966	97.2	2.9	96.7	4.4
1967	100.0	2.9	100.0	3.4
1968	104.2	4.2	104.3	4.3
1969	109.8	5.4	110.6	6.0
1970	116.3	5.9	117.4	6.1
1971	121.3	4.3	121.7	3.7
1972	125.3	3.3	126.2	3.7
1973	133.1	6.2	134.5	6.6
1974	147.7	11.0	149.1	10.9
1975	161.2	9.1	160.3	7.5
1976	170.5	5.8	168.9	5.4
1977	181.5	6.5	180.4	6.8
1978	195.4	7.7	194.1	7.6
1979	217.4	11.3	218.8	12.7
1980	246.8	13.5	253.5	15.9
1981	272.4	10.4	277.1	9.3
1982	289.1	6.1	288.3	4.0
1983	298.4	3.2	296.5	2.8

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table B-18

New Incorporations in Michigan, 1955-1983

Year	Profit	Nonprofit	Foreign (Out-of-State)	Total
1955	4,619	1,094	379	6,092
1956	4,337	1,196	389	5,922
1957	3,842	1,391	461	5,694
1958	3,900	1,272	404	5,576
1959	4,812	1,209	527	6,548
1960	4,800	1,261	499	6,560
1961	4,788	1,312	497	6,597
1962	5,135	1,243	601	6,979
1963	5,102	1,241	528	6,871
1964	5,825	1,256	593	7,674
1965	6,152	1,286	627	8,065
1966	6,315	1,356	640	8,311
1967	6,341	1,361	715	8,417
1968	7,700	1,588	825	10,113
1969	9,586	1,767	1,064	12,417
1970	8,378	1,782	1,054	11,214
1971	8,270	1,993	1,082	11,214
1972	9,202	2,134	1,175	12,511
1973	9,709	1,878	1,093	12,680
1974	9,342	2,106	1,009	12,457
1975	9,996	2,138	926	13,060
1976	11,545	2,080	972	14,597
1977	13,273	2,082	956	16,311
1978	14,538	2,148	1,039	17,725
1979	18,654	2,217	1,062	21,933
1980	16,931	2,503	1,077	20,511
1981	17,139	2,288	1,277	20,704
1982	17,201	2,294	1,300	20,795
1983	18,463	2,613	1,540	22,616

Source: Michigan Department of Commerce, Corporation Division.

Table B-19

Michigan Liquid Assets, 1970-1983
(Millions)

End of Year	Total	Demand Deposits	Time Deposits	Savings and Loan Shares	Credit Union Shares and Deposits
1970	$25,370.1	$ 7,092.3	$12,770.7	$ 4,193.4	$1,313.7
1971	28,743.7	7,841.7	14,413.3	5,001.7	1,487.0
1972	32,002.6	8,555.2	15,754.5	6,029.8	1,663.1
1973	34,991.7	9,127.5	17,210.3	6,747.8	1,906.1
1974	37,214.7	9,187.0	18,655.7	7,320.0	2,052.0
1975	39,987.8	9,116.7	19,950.6	8,625.5	2,295.0
1976	43,567.2	9,084.7	21,873.4	10,175.0	2,434.0
1977	48,881.0	10,143.9	24,137.0	11,761.8	2,838.3
1978	54,303.9	11,246.6	26,648.7	13,248.8	3,160.0
1979	58,025.3	10,951.3	29,098.7	14,444.3	3,531.0
1980	61,251.8	10,662.7	31,047.3	15,937.0	3,604.8
1981	63,498.7	9,673.9	34,190.8	15,934.0	3,700.0
1982	65,627.9	8,941.8	37,077.9	15,408.2	4,200.0
1983[1]	76,379.3	9,320.0	40,375.3	21,784.0	4,900.0

[1]Preliminary.

Source: Federal Deposit Insurance Corporation, the Michigan Credit Union League, and the Federal Home Loan Bank of Indianapolis.

Table B-20

U.S. Interest Rates, 1961-1983
(Percent Per Annum)

Period	U.S. Government Security Yields: 3-Month Treasury Bills[1]	U.S. Government Security Yields: 10-Year Issues	Prime Commercial Paper (4-6 Months)	High Grade Municipal Bonds (Standard & Poor's)	Corporate Bonds (Moody's Aaa)
1961	2.378	——	2.97	3.46	4.35
1962	2.778	——	3.26	3.18	4.33
1963	3.157	——	3.55	3.23	4.26
1964	3.549	——	3.97	3.22	4.40
1965	3.954	——	4.38	3.27	4.49
1966	4.881	——	5.55	3.82	5.13
1967	4.321	——	5.10	3.98	5.51
1968	5.339	——	5.90	4.51	6.18
1969	6.677	——	7.83	5.81	7.03
1970	5.458	——	7.72	6.51	8.04
1971	4.348	——	5.11	5.70	7.39
1972	4.071	6.21	4.69	5.27	7.21
1973	7.041	6.84	8.15	5.18	7.44
1974	7.886	7.99	9.84	6.09	8.57
1975	5.838	7.6	6.32	6.89	8.83
1976	4.989	7.42	5.34	6.49	8.43
1977	5.265	8.41	5.61	5.56	8.02
1978	7.221	9.44	7.99	5.90	8.73
1979	10.041	10.65	10.91[2]	6.39	9.63
1980	11.506	11.46	12.29	8.51	11.94
1981	14.077	13.91	14.76	11.23	14.17
1982	10,686	13.00	11.89	11.57	13.79
1983	8,630	11.10	8.89	9.47	12.04

[1]Rate on new issues within period.

[2]Beginning November 1, 1979, data are for 6-month paper.

Source: Economic Indicators, Council of Economic Advisors, selected issues.

Table B-21

New Private Housing Units Authorized in Michigan SMSAs, 1977-1983

SMSA	1977	1978	1979	1980	1981	1982	1983[1]
Ann Arbor	1,670	2,390	1,302	985	271	214	341
Battle Creek	845	781	831	742	219	176	295
Bay City	578	500	346	174	87	71	90
Detroit	24,672	26,409	20,050	9,824	5,460	4,603	8,423
Flint	3,282	3,277	2,281	1,244	631	353	734
Grand Rapids	4,563	5,832	4,123	2,627	1,909	1,546	2,647
Jackson	1,177	663	819	273	241	355	124
Kalamazoo-Portage	2,640	1,674	1,838	1,785	1,414	432	796
Lansing-East Lansing	3,800	3,455	3,986	2,206	1,711	772	1,212
Muskegon-Muskegon Heights	847	1,173	674	803	362	323	236
Saginaw	1,343	1,251	1,250	587	238	252	155

[1]Preliminary.

Source: "Housing Units Authorized by Building Permits and Public Contracts," Construction Reports, Series C40, U.S. Department of Commerce, Bureau of the Census, 1977-1982.

Table B-22

Motor Vehicle Registrations, 1962-1983
(Thousands)

	Michigan				U.S.	
Year	Automobiles	Trucks and Buses	Total	Percent Change in Total	Total Motor Vehicle Registrations[1]	Michigan as Percent of U.S.
1962	3,026	429	3,455	3.0	79,173	4.36
1963	3,161	439	3,600	4.2	82,714	4.35
1964	3,294	465	3,759	4.4	86,301	4.36
1965	3,497	494	3,991	6.2	90,361	4.42
1966	3,516	508	4,024	0.8	93,962	4.28
1967	3,587	546	4,133	2.7	96,931	4.26
1968	3,734	583	4,317	4.5	100,885	4.28
1969	3,873	615	4,488	4.0	105,097	4.26
1970	3,918	651	4,569	1.8	198,375	4.22
1971	4,052	687	4,740	3.7	112,922	4.20
1972	4,265	745	5,010	5.7	118,506	4.23
1973	4,436	804	5,240	4.6	125,420	4.18
1974	4,536	865	5,401	3.1	129,938	4.16
1975	4,628	918	5,546	2.7	132,951	4.17
1976	4,726	975	5,701	2.8	138,549	4.11
1977	4,954	1,032	5,986	5.0	143,747	4.16
1978	5,124	1,121	6,245	4.3	148,778	4.20
1979	5,093	1,248	6,341	1.5	154,118	4.11
1980	5,246	1,242	6,488	2.3	155,890	4.16
1981	5,005	1,161	6,166	- 5.0	158,457	3.89
1982	5,005	1,245	6,250	1.4	158,940	3.93
1983[2]	n.a.	n.a.	n.a.	n.a.	161,365	n.a.

[1]This definition of motor vehicles includes only nonmilitary automobiles, trucks and buses.

[2]Preliminary.

Source: U.S. Federal Highway Administration.

Table B-23

New Passenger Car Sales in Michigan, 1967-1983[1]

Year	Number	Percent of U.S. Total
1967	515,692	6.23
1968	596,485	6.34
1969	587,689	6.13
1970	479,224	6.13
1971	633,963	6.52
1972	646,146	6.57
1973	664,505	6.62
1974	513,129	5.89
1975	496,476	6.01
1976	606,979	6.22
1977	504,122	6.18
1978	669,700	6.12
1979	611,443	6.68
1980	449,487	5.13
1981	445,758	5.28
1982	374,643	4.83
1983	485,062	5.44

[1]Retail sales as measured by new car registrations.

Source: R. L. Polk and Company, Motor Statistical Division.

Table B-24

State Share of Passenger Car Assemblies, 1971-1983 Model Years
(Percent of Total)

State	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
U.S. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Michigan	31.0	32.4	33.3	31.0	33.2	33.9	32.4	30.2	29.1	26.2	30.4	36.0	33.3
California	8.2	7.4	8.4	7.6	6.7	6.7	8.1	7.8	8.8	5.0	4.4	6.6	2.4
Delaware	4.5	4.6	4.4	3.8	3.5	4.9	4.0	5.6	5.4	6.3	7.9	7.0	7.3
Georgia	5.1	6.3	5.8	5.4	5.5	6.6	6.5	5.7	5.0	5.8	7.2	6.8	5.6
Illinois	5.8	4.8	4.4	4.0	4.6	3.5	4.5	5.0	5.6	5.8	6.1	5.7	6.8
Kansas	2.4	2.3	2.2	1.5	2.3	2.8	2.9	2.6	2.7	2.1	1.5	2.3	4.0
Kentucky	1.2	0.9	0.9	0.8	1.3	1.1	1.1	1.3	1.1	0.5	1.3	0.5	0.3
Maryland	1.9	2.2	2.3	2.9	3.3	3.1	2.6	2.4	2.6	2.0	1.6	2.0	2.4
Massachusetts	1.2	1.4	1.7	1.2	0.9	1.0	1.5	1.7	1.8	2.4	2.1	1.6	0.9
Minnesota	1.3	0.9	0.8	0.9	1.3	1.0	1.3	0.9	—	—	—	—	—
Missouri	11.2	9.8	10.1	11.2	9.8	9.2	11.1	11.9	11.1	8.2	7.9	7.9	9.3
New Jersey	6.7	7.1	6.3	6.5	6.5	6.8	6.6	6.1	6.5	7.1	5.6	5.3	4.6
New York	1.9	2.2	2.0	1.9	1.6	1.4	2.5	2.6	2.6	4.2	4.4	3.5	1.7
Ohio	8.8	9.6	9.0	10.8	10.4	8.7	7.3	9.8	8.9	9.5	4.3	5.9	8.8
Oklahoma	—	—	—	—	—	—	—	—	0.4	4.2	4.9	1.7	2.6
Pennsylvania	—	—	—	—	—	—	—	—	1.4	3.3	2.7	2.0	1.3
Texas	2.3	2.2	2.4	2.6	3.0	2.9	2.5	2.1	2.3	2.5	2.9	3.2	3.5
Virginia	0.6	0.5	0.5	0.3	—	—	—	—	—	—	—	—	—
Wisconsin	5.2	5.4	5.5	7.6	6.1	6.4	5.0	4.3	4.5	4.9	4.8	2.0	5.2

Source: Ward's Automotive Reports, Ward's Communications, Inc., selected issues.

Table B-25

U.S. Motor Vehicle Production, 1976-1983

Year		Passenger Cars	Trucks and Buses	Total Motor Vehicles
1976		8,497,660	2,999,703	11,497,363
1977		9,191,377	3,473,626	12,665,003
1978		9,176,635	3,722,567	12,899,202
1979		8,434,150	3,046,586	11,480,736
1980		6,375,516	1,632,826	8,008,342
1981		6,240,245	1,635,659	7,875,904
1982		4,973,870	1,902,164	6,976,034
1983		6,798,071	2,421,095	9,219,166
1982:	January	266,858	124,104	390,962
	February	311,926	144,444	456,370
	March	455,802	194,305	650,113
	April	474,222	184,434	658,656
	May	499,242	192,008	691,250
	June	546,807	212,837	759,644
	July	436,644	161,807	598,451
	August	353,656	142,571	496,227
	September	425,047	148,349	573,396
	October	415,197	141,422	556,619
	November	404,542	126,935	531,477
	December	383,921	128,948	512,869
1983:	January	435,455	128,563	564,018
	February	494,288	172,095	666,383
	March	574,535	210,744	785,279
	April	533,792	189,085	722,877
	May	611,350	208,784	820,134
	June	653,151	233,883	887,034
	July	461,046	157,293	618,339
	August	484,081	197,741	681,822
	September	629,056	230,349	859,405
	October	690,375	241,463	931,838
	November	650,092	243,558	893,650
	December	580,850	207,537	788,387

Source: Automotive News, Crain Automotive Group, Inc., selected issues, Motor Vehicle Facts and Figures, Motor Vehicle Manufacturers Association of the U.S., Inc.

Table B-26

U.S. Automobile Sales, Truck Sales, Inventories, and Stock, 1957-1983
(Thousands)

Year	U.S. Automobile Sales (Retail)	Domestic Nameplate Sales	Foreign Import Sales	Foreign Import Sales as Percent of U.S. Auto Sales	End of Year Inventory	U.S. Stock of Autos (Still in Use)	Truck Retail Sales	U.S. Stock of Trucks
1957	5,961	5,754	207	3.5	652	51,432	879	9,776
1958	4,575	4,204	371	8.1	544	52,492	731	10,057
1959	6,094	5,408	614	10.1	567	55,087	928	10,532
1960	6,637	6,139	498	7.5	841	57,103	925	10,803
1961	5,934	5,556	379	6.4	855	58,854	908	11,043
1962	7,093	6,752	341	4.8	841	60,920	1,068	11,463
1963	7,744	7,344	400	5.2	935	63,493	1,230	11,902
1964	8,098	7,614	484	6.0	923	66,051	1,352	12,445
1965	9,328	8,760	568	6.1	1,264	68,940	1,534	13,126
1966	9,024	8,373	651	7.2	1,309	71,264	1,614	14,357
1967	8,342	7,573	769	9.2	1,133	72,968	1,519	14,988
1968	9,638	8,607	1,031	10.7	1,467	75,385	1,805	15,685
1969	9,584	8,466	1,118	11.7	1,464	78,495	1,929	16,586
1970	8,383	7,116	1,267	15.1	1,220	80,448	1,746	17,688
1971	10,249	8,676	1,573	15.3	1,447	83,137	2,009	18,462
1972	10,944	9,322	1,622	14.8	1,310	86,439	2,531	19,773
1973	11,441	9,670	1,770	15.5	1,600	89,805	3,029	21,412
1974	8,867	7,451	1,395	16.0	1,655	92,608	2,587	23,312
1975	8,636	7,050	1,589	18.4	1,424	95,241	2,351	24,813
1976	10,100	8,607	1,493	14.8	1,465	97,818	3,044	26,560
1977	11,178	9,104	2,071	18.5	1,731	99,904	3,486	28,222
1978	11,308	9,308	2,000	17.7	1,729	102,957	3,914	30,565
1979	10,651	8,325	2,326	21.9	1,767	104,677	4,110	32,583
1980	8,973	6,578	2,395	26.7	1,448	104,564	3,476	35,268
1981	8,531	6,206	2,325	27.3	1,471	105,839	2,252	36,069
1982	7,978	5,757	2,221	27.8	1,126	106,867	2,559	36,987
1983	9,178	6,795	2,383	26.0	1,358	n.a.	3,129	n.a.

Source: Automotive News, Crain Automotive Group, Inc., selected issues. Motor Vehicle Facts and Figures, Motor Vehicle Manufacturers Association of the U.S., Inc.

Table B-27

U.S. and Michigan Motor Vehicle Industry Employment, Earnings, and Hours, 1957-1983

Year	MICHIGAN				UNITED STATES				Michigan Motor Vehicle Employment as Percent of U.S. Motor Vehicle Employment
	Number Employed (Thousands)	Average Weekly Earnings	Average Weekly Hours	Average Hourly Earnings	Number Employed (Thousands)	Average Weekly Earnings	Average Weekly Hours	Average Hourly Earnings	
1957	387.7	$100.47	39.6	$ 2.54	769.3	$100.61	40.9	$ 2.46	50.4
1958	288.5	103.04	38.9	2.67	606.5	101.24	39.7	2.55	47.6
1959	303.4	115.60	40.7	2.84	592.3	111.38	41.1	2.71	43.8
1960	311.2	119.96	41.0	2.93	724.1	115.21	41.0	2.81	43.0
1961	268.4	117.18	39.3	2.98	632.3	114.69	40.1	2.86	42.4
1962	299.2	134.02	43.4	3.09	691.7	127.67	42.7	2.99	43.3
1963	315.8	141.68	43.9	3.23	741.3	132.68	42.8	3.10	42.6
1964	329.3	147.98	44.5	3.33	752.9	138.03	43.0	3.21	43.7
1965	364.5	159.85	46.2	3.46	842.7	147.63	44.2	3.34	43.3
1966	381.9	157.19	43.7	3.60	861.6	147.23	42.8	3.44	44.3
1967	361.8	155.29	41.6	3.73	815.8	144.84	40.8	3.55	44.3
1968	382.8	131.75	45.2	2.91	873.7	168.09	43.1	3.90	43.8
1969	398.7	178.74	42.1	4.25	911.4	170.56	41.6	4.10	43.7
1970	335.3	178.30	39.9	4.47	797.3	170.07	40.3	4.22	42.1
1971	353.6	209.54	41.6	5.04	842.1	194.46	41.2	4.72	42.0
1972	369.6	240.05	43.9	5.47	860.9	219.22	42.9	5.11	42.9
1973	401.0	258.07	44.8	5.76	955.3	238.06	43.6	5.46	42.0
1974	366.1	258.10	41.0	6.29	890.8	239.54	40.6	5.90	41.1
1975	321.2	286.98	41.7	6.88	774.1	262.68	40.6	6.46	41.5
1976	357.7	338.70	44.7	7.58	850.6	305.30	43.0	7.10	42.1
1977	386.5	382.46	45.0	8.50	947.3	345.40	44.0	7.85	40.8
1978	409.6	397.47	44.4	8.95	1,004.9	368.05	43.3	8.50	40.8
1979	392.7	411.80	41.6	9.90	990.4	372.37	41.1	9.06	39.7
1980	326.3	439.51	40.0	10.99	762.6	391.42	39.9	9.81	43.7
1981	319.4	490.51	40.7	12.05	783.9	450.31	40.9	11.01	41.4
1982	287.0	526.41	40.7	12.92	704.8	470.61	40.5	11.62	40.7
1983	302.0	596.44	44.3	13.45	772.7	525.66	43.3	12.14	39.1

Source: U.S. Department of Labor and Michigan Employment Security Commission.

Table B-28

U.S. Automobile Price Indices, Personal Consumption Expenditures and Installment Credit, 1958-1983

Year	Wholesale Price Index Motor Vehicles and Equipment (1967=100)	Consumer Price Index New Cars (1967=100)	Consumer Price Index Used Cars (1967=100)	Personal Consumption Expenditures Auto and Parts (Billions)	Automobile Installment Credit (Millions)		
					Extended	Repaid	Total Consumer Credit-Auto Paper
1958	98.1	101.5	80.2	14.8	$14,226	$15,415	$ 14,152
1959	100.3	105.9	89.5	18.9	17,779	15,579	16,420
1960	98.8	104.5	83.6	19.7	17,657	16,419	17,658
1961	98.6	104.5	86.9	17.8	16,029	16,552	17,135
1962	98.6	104.1	94.8	21.5	19,694	17,447	19,381
1963	97.8	103.5	96.0	24.4	22,126	19,254	22,254
1964	98.3	103.2	100.1	26.1	24,046	21,369	24,934
1965	98.5	100.9	99.4	30.0	27,227	23,543	28,619
1966	98.6	99.1	97.0	30.4	27,341	25,404	30,556
1967	100.0	100.0	100.0	30.1	26,667	26,499	30,724
1968	102.8	102.8	102.6	36.3	31,424	28,018	34,130
1969	104.8	104.4	103.1	38.7	32,354	29,882	36,602
1970	108.5	107.6	104.3	36.2	29,791	30,137	35,184
1971	114.7	112.0	110.2	45.4	34,873	31,393	38,664
1972	118.0	111.0	110.5	52.4	40,194	34,729	44,129
1973	119.2	111.1	117.6	57.1	46,453	39,452	51,130
1974	128.2	117.5	122.6	50.4	45,429	44,929	52,871
1975	144.6	127.6	146.4	55.8	51,413	48,406	55,879
1976	153.7	135.7	167.9	72.6	63,743	53,278	67,798
1977	163.7	142.9	182.8	84.8	75,641	60,437	82,890
1978	176.0	153.8	186.5	95.7	87,981	69,245	101,863
1979	190.4	166.0	201.0	96.6	93,901	79,186	116,523
1980	208.7	179.3	208.1	90.7	83,454	82,977	116,808
1981	237.6	190.2	256.9	101.6	93,240	84,745	125,323
1982	251.3	197.6	296.4	109.9	95,997	91,099	130,235
1983	256.9	202.6	329.7	133.2	n.a.	n.a.	146,079

Source: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; and the Federal Reserve System, the Board of Governors.

Table B-29

U.S. Motor Vehicle Production and Auto Sales, Quarterly, 1978-1983
(Thousands)

Year/ Quarter	U.S. Auto Production	U.S. Truck and Bus Production	Total Motor Vehicle Production	Domestic Auto Sales	Import Auto Sales	Total U.S. Auto Sales
1978: I	2,268	865	3,133	2,056	485	2,541
II	2,659	1,008	3,667	2,776	562	3,338
III	1,851	853	2,704	2,177	540	2,717
IV	2,398	996	3,394	2,299	413	2,712
1979: I	2,411	1,031	3,442	2,173	553	2,726
II	2,483	915	3,398	2,262	682	2,944
III	1,656	535	2,191	1,993	578	2,571
IV	1,884	565	2,449	1,892	512	2,404
1980: I	1,784	500	2,283	1,848	663	2,511
II	1,634	351	1,983	1,550	590	2,140
III	1,260	309	1,568	1,515	613	2,128
IV	1,698	476	2,174	1,665	529	2,194
1981: I	1,590	441	2,031	1,733	641	2,373
II	2,033	491	2,524	1,576	633	2,209
III	1,346	340	1,686	1,617	576	2,193
IV	1,302	401	1,703	1,280	475	1,755
1982: I	1,035	463	1,498	1,401	542	1,943
II	1,520	589	2,109	1,534	560	2,094
III	1,215	453	1,668	1,328	581	1,909
IV	1,204	397	1,601	1,494	538	2,032
1983: I	1,504	511	2,015	1,456	590	2,046
II	1,798	632	2,430	1,878	625	2,503
III	1,574	585	2,159	1,646	590	2,236
IV	1,921	693	2,614	1,814	579	2,393

Source: Motor Vehicle Manufacturers' Association of the U.S. Automotive News, Crain Automotive Group, Inc., selected issues.

Table B-30

Rate Changes Granted to Regulated Utilities in 1983

Telephone Companies	
Augusta Telephone	$ 36,320
Pigeon Telephone	21,091
Springport Telephone	10,083
Total	$ 67,494
Electric Companies	
Alger Electric	$ 371,619
Ontonagon Rural Electrification Association	39,467
Consumers' Power	243,400,000[1]
Detroit Edison	203,400,000
Fruit-Belt Electric Cooperative	557,000
Tri-County Rural Electric Cooperative	619,000
Michigan Power	2,285,360
Total	$450,672,446
Gas Companies	
Michigan Consolidated Gas	$153,739,000[1]
Consumers' Power	132,580,000[1]
Wisconsin Public Service Corporation	296,080
Peninsular Gas	105,908
Lake Superior District Power	318,596
Total	$287,039,584
Grand Total	$737,779,524

[1]Portion of the rate increase is an interim increase.

Source: Michigan Department of Commerce, Public Service Commission.

Table B-31

Prices Received by Michigan Farmers, 1972-1983

Commodity	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Corn (per bushel)	$ 1.49	$ 2.52	$ 2.91	$ 2.35	$ 2.38	$ 1.93	$ 2.05	$ 2.38	$ 2.66	$ 2.86	$ 2.27	$ 2.98
Wheat (per bushel)	1.67	4.30	3.64	3.10	2.87	2.12	3.01	3.61	3.78	3.46	3.20	3.39
Oats (per bushel)	.84	1.35	1.65	1.40	1.47	1.50	1.32	1.36	1.72	2.09	1.82	1.71
Soybeans (per bushel)	4.60	5.73	6.28	4.50	5.51	6.71	6.16	6.77	6.58	6.71	5.68	6.72
Dry Beans (per cwt.)	9.70	27.30	14.80	29.30	18.69	16.51	16.88	16.48	20.97	30.08	19.38	17.91
Potatoes (per cwt.)	3.66	6.13	4.15	6.03	5.23	5.76	4.64	4.82	6.42	9.23	6.01	6.36
Hay (baled, per ton)	29.50	31.00	39.00	43.50	46.68	52.67	54.42	40.83	36.08	44.38	62.33	52.00
Hogs (per cwt.)	$25.50	$39.50	$35.80	$49.04	$44.10	$40.80	$47.87	$42.83	$39.38	$43.28	$54.15	$46.10
Beef Cattle (per cwt.)	30.50	40.20	34.60	33.37	33.28	33.06	45.57	60.29	55.68	49.68	52.60	47.20
Veal Calves (per cwt.)	49.70	62.40	46.50	30.20	34.68	38.92	62.61	94.12	82.10	65.38	56.52	57.50
Lambs (per cwt.)	29.50	36.60	38.70	42.82	46.89	51.78	62.30	66.49	62.62	52.64	n.a.	n.a.
Milk (whsl., per cwt.)	6.17	7.18	8.20	8.57	9.85	9.66	10.49	12.08	13.17	13.85	13.65	13.63
Turkeys (per lb.)	.23	.36	.29	.30	.30	.35	.46	.46	.43	.41	n.a.	n.a.
Eggs (per doz.)	.26	.50	.48	.46	.54	.49	.47	.50	.48	.54	.49	.52
Wool (per lb.)	.29	.63	.37	.25	.47	.64	.65	.68	.70	.66	n.a.	n.a.

Source: Agricultural Prices, U.S. Department of Agriculture, Crop Reporting Board. Agriculture Across Michigan, U.S. Department of Agriculture and Michigan Department of Agriculture.

Table B-32

Michigan Farm Income Components, 1967-1983
(Millions)

Year	Realized Farm Income					Farm Production Expenses	Net Changes in Farm Inventories	Net Farm[1] Income After Inventory Adjustments
	Cash Receipts From Farm Marketings	Government Payments	Nonmoney Income	Other Farm Income	Total			
1967	$ 850.2	$56.0	$108.6	$10.2	$1,025.0	$ 768.7	$- 18.6	$237.7
1968	849.1	65.3	110.0	10.3	1,034.7	789.9	1.0	245.8
1969	888.2	73.4	117.1	10.5	1,089.1	799.5	6.0	295.6
1970	909.6	65.7	126.0	10.7	1,111.9	855.0	20.9	277.8
1971	972.5	52.5	128.0	12.5	1,165.5	889.2	- 27.9	248.4
1972	1,036.7	61.2	142.9	13.2	1,254.0	940.7	58.4	371.7
1973	1,514.7	38.9	169.9	16.7	1,740.1	1,119.0	- 91.7	529.4
1974	1,657.7	10.4	182.6	17.4	1,868.2	1,342.7	64.2	589.7
1975	1,657.4	13.3	190.3	20.4	1,881.3	1,425.4	58.2	514.1
1976	1,744.3	7.3	205.8	20.7	1,978.2	1,560.7	- 18.6	399.0
1977	1,949.2	21.2	276.8	23.0	2,269.8	1,726.1	- 38.3	505.5
1978	2,055.2	45.5	289.2	24.1	2,414.1	1,964.8	16.8	466.0
1979	2,321.4	15.6	319.2	30.4	2,686.5	2,264.0	97.3	519.8
1980	2,748.6	10.7	359.0	30.9	3,149.2	2,642.5	- 37.8	468.8
1981	2,787.9	17.3	416.6	38.1	3,259.9	2,865.1	165.4	560.3
1982	2,862.6	40.4	431.0	40.4	3,374.4	2,953.5	27.6	448.5
1983[2]	2,960.2	n.a	n.a.	n.a.	n.a.	2,569.6	-181.9	530.0

[1]Net farm income reported by the U.S. Department of Agriculture does not always agree with that reported by the U.S. Department of Commerce, Bureau of Economic Analysis.

[2]Estimate.

Source: U.S. Department of Agriculture, Economic Research Service.

Table B-33

Number of Farms, Average Size, and Land in Farms in Michigan, 1955-1983

Year	Number of Farms	Average Size (acres)	Land in Farms (acres)
1955	138,000	122	16,900,000
1956	135,000	120	16,600,000
1957	132,000	123	16,300,000
1958	127,000	126	16,000,000
1959	123,000	128	15,700,000
1960	118,000	131	15,400,000
1961	114,000	132	15,100,000
1962	110,000	135	14,800,000
1963	106,000	138	14,600,000
1964	102,000	141	14,400 000
1965	98,000	144	14,100,000
1966	95,000	146	13,900,000
1967	92,000	148	13,600,000
1968	89,000	149	13,300,000
1969	86,000	150	12,900,000
1970	84,000	151	12,700,000
1971	82,000	152	12,500,000
1972	81,000	152	12,300,000
1973	78,000	154	12,000,000
1974	76,000	154	11,700,000
1975	70,000	164	11,500,000
1976	70,000	163	11,400,000
1977	68,000	168	11,400,000
1978	66,000	173	11,400,000
1979	66,000	173	11,400,000
1980	66,000	173	11,400,000
1981	66,000	175	11,500,000
1982	65,000	177	11,500,000
1983	65,000	177	11,500,000

Source: Michigan Department of Agriculture, based on the U.S. Census of Agriculture.

Table B-34

U.S. and Michigan Resident Population
July 1, 1951--July 1, 1983
(Thousands)

Year	Michigan Population	U.S. Population	Michigan as a Percent of U.S.
1951	6,497	153,982	4.22
1952	6,650	156,393	4.25
1953	6,822	158,956	4.29
1954	7,066	161,884	4.36
1955	7,285	165,069	4.41
1956	7,465	168,088	4.44
1957	7,569	171,187	4.42
1958	7,667	174,149	4.40
1959	7,767	177,135	4.38
1960	7,834	179,975	4.35
1961	7,893	182,973	4.32
1962	7,933	185,738	4.27
1963	8,058	188,438	4.28
1964	8,187	191,095	4.28
1965	8,357	193,460	4.32
1966	8,512	195,501	4.35
1967	8,630	197,374	4.37
1968	8,696	199,312	4.36
1969	8,781	201,306	4.36
1970	8,901	203,805	4.37
1971	8,972	206,827	4.34
1972	9,025	209,284	4.31
1973	9,072	211,357	4.29
1974	9,109	213,342	4.26
1975	9,108	215,465	4.23
1976	9,177	217,563	4.19
1977	9,157	219,760	4.16
1978	9,202	222,095	4.14
1979	9,249	224,567	4.12
1980[1]	9,262	226,505	4.09
1981	9,265	229,304	4.04
1982	9,208	231,479	3.98
1983[2]	9,155	233,722	3.92

[1]April 1, 1980.

[2]Provisional estimates.

Source: Current Population Reports, Series P-25, Bureau of the Census. Figures for 1981 and 1982 were prepared by the Michigan Department of Management and Budget.

Table B-35

Michigan Population by County, 1980-1983

County	July 1, 1983 Preliminary[1]	April 1, 1980 Census	1980-83 Change Number	1980-83 Change Percent	Components of Change: Births[2]	Components of Change: Deaths[2]	Net Migration[3] Number	Net Migration[3] Percent
Michigan	9,155,480	9,262,078	-106,598	- 1.15	454,834	245,788	-315,644	- 3.41
Alcona	9,969	9,740	229	2.35	344	395	280	2.87
Alger	8,683	9,225	- 542	- 5.88	468	339	- 671	- 7.28
Allegan	82,581	81,555	1,026	1.26	4,414	2,022	- 1,366	- 1.67
Alpena	31,633	32,315	- 682	- 2.11	1,576	907	- 1,351	- 4.18
Antrim	16,678	16,194	484	2.99	786	576	274	1.69
Arenac	15,174	14,706	468	3.18	739	536	265	1.80
Baraga	8.446	8,484	- 38	- .45	394	347	- 85	- 1.00
Barry	45,881	45,781	100	.22	2,245	1,127	- 1,019	- 2.22
Bay	117,444	119,881	- 2,437	- 2.03	5,885	3,095	- 5,227	- 4.36
Benzie	11,029	11,205	- 176	- 1.57	565	393	- 348	- 3.11
Berrien	165,741	171,276	- 5,535	- 3.23	8,394	4,750	- 9,179	- 5.36
Branch	39,057	40,188	- 1,131	- 2.82	2,186	1,185	- 2,132	- 5.31
Calhoun	139,965	141,557	- 1,592	- 1.12	6,958	4,094	- 4,456	- 3.15
Cass	47,102	49,499	- 2,397	- 4.84	2,170	1,284	- 3,283	- 6.63
Charlevoix	19,822	19,907	- 85	- .43	1,105	626	- 564	- 2.84
Cheboygan	21,190	20,649	541	2.62	1,103	695	133	.64
Chippewa	29,071	29,029	42	.14	1,307	940	- 325	- 1.12
Clare	24,426	23,822	604	2.54	1,158	849	295	1.24
Clinton	54,844	55,893	- 1,049	- 1.88	2,861	993	- 2,917	- 5.22
Crawford	9,775	9,465	310	3.27	583	299	26	.27
Delta	39,565	38,947	618	1.59	1,987	1,176	- 194	- .50
Dickinson	25,385	25,341	44	.17	1,219	958	- 218	- .86
Eaton	88,054	88,337	- 283	- .32	4,052	1,738	- 2,597	- 2.94
Emmet	23,770	22,992	778	3.38	1,132	684	330	1.43
Genesee	443,681	450,449	- 6,768	- 1.50	23,738	10,747	- 19,759	- 4.39
Gladwin	21,117	19,957	1,160	5.81	964	652	848	4.25
Gogebic	19,549	19,686	- 137	- .70	761	941	43	.22
Grand Traverse	56,663	54,899	1,764	3.21	2,996	1,444	212	.39
Gratiot	39,909	40,448	- 539	- 1.33	1,999	1,297	- 1,241	- 3.07
Hillsdale	41,723	42,071	- 348	- .83	2,066	1,259	- 1,155	- 2.75

Table B-35 (continued)

Michigan Population by County, 1980-1983

County	July 1, 1983 Preliminary[1]	April 1, 1980 Census	1980-83 Change Number	1980-83 Change Percent	Components of Change: Births[2]	Components of Change: Deaths[2]	Components of Change: Net Migration[3] Number	Components of Change: Net Migration[3] Percent
Houghton	38,790	37,872	918	2.42	1,685	1,369	602	1.59
Huron	35,707	36,459	- 752	- 2.06	1,860	1,254	- 1,358	- 3.72
Ingham	275,341	275,520	- 179	- .07	14,273	5,274	- 9,178	- 3.33
Ionia	52,321	51,815	506	.98	3,007	1,320	- 1,182	- 2.28
Iosco	30,633	28,349	2,284	8.06	1,831	917	1,370	4.83
Iron	13,588	13,635	- 47	- .34	560	623	16	.12
Isabella	54,789	54,110	679	1.25	2,346	984	- 683	- 1.26
Jackson	148,003	151,495	- 3,492	- 2.31	7,038	4,093	- 6,437	- 4.25
Kalamazoo	217,630	212,378	5,252	2.47	10,402	4,791	- 359	- .17
Kalkaska	11,341	10,952	389	3.55	718	331	2	.01
Kent	460,394	444,506	15,888	3.57	27,407	11,190	- 330	- .07
Kewecnaw	2,001	1,963	38	1.94	74	128	92	4.69
Lake	8,526	7,711	815	10.57	366	378	827	10.72
Lapeer	68,664	70,038	- 1,374	- 1.96	3,585	1,519	- 3,440	- 4.91
Leelanau	14,240	14,007	233	1.66	644	405	- 6	- .04
Lenawee	88,138	89,948	- 1,810	- 2.01	4,388	2,307	- 3,891	- 4.33
Livingston	97,178	100,289	- 3,111	- 3.10	4,549	1,864	- 5,796	- 5.78
Luce	6,014	6,659	- 645	- 9.69	303	246	- 702	-10.55
Mackinac	10,041	10.178	- 137	- 1.35	473	376	- 234	- 2.30
Macomb	687,583	694,600	- 7,017	- 1.01	30,664	15,620	- 22,061	- 3.18
Manistee	22,211	23,019	- 808	- 3.51	937	805	- 940	- 4.09
Marquette	72,694	74,101	- 1,407	- 1.90	4,211	1,559	- 4,059	- 5.48
Mason	26,369	26,365	4	.02	1,333	914	- 415	- 1.57
Mecosta	36,665	36,961	- 296	- .80	1,438	748	- 986	- 2.67
Menominee	25,519	26,201	- 682	- 2.60	1,334	930	- 1,086	- 4.15
Midland	74,274	73,578	696	.95	3,767	1,435	- 1,636	- 2.22
Missaukee	10,299	10,009	290	2.89	659	293	- 77	- .76
Monroe	128,666	134,659	- 5,993	- 4.45	6,074	2,892	- 9,175	- 6.81
Montcalm	49,348	47,555	1,793	3.77	2,617	1,441	617	1.30
Montmorency	7,886	7,492	394	5.26	352	317	359	4.79
Muskegon	156,380	157,589	- 1,209	- .77	8,333	4,434	- 5,108	- 3.24
Newaygo	35,862	34,917	945	2.70	1,796	1,074	223	.64

Table B-35 (continued)

Michigan Population by County, 1980-1983

County	July 1, 1983 Preliminary[1]	April 1, 1980 Census	1980-83 Change Number	1980-83 Change Percent	Components of Change: Births[2]	Components of Change: Deaths[2]	Components of Change: Net Migration[3] Number	Components of Change: Net Migration[3] Percent
Oakland	1,006,273	1,011,793	- 5,520	- .55	45,095	23,608	- 27,007	- 2.67
Oceana	21,588	22,002	- 414	- 1.88	1,241	629	- 1,026	- 4.66
Ogemaw	16,481	16,436	45	.27	873	641	- 187	- 1.14
Ontonagon	10,000	9,861	139	1.40	379	372	132	1.33
Osceola	19,677	18,928	749	3.95	1,039	551	261	1.38
Oscoda	6,792	6,858	- 66	- .96	364	295	- 135	- 1.97
Otsego	15,283	14,993	290	1.93	859	451	- 119	- .79
Ottawa	161,007	157,174	3,833	2.44	8,843	3,105	- 1,905	- 1.21
Presque Isle	13,982	14,267	- 285	- 2.00	693	502	- 476	- 3.34
Roscommon	17,771	16,374	1,397	8.53	753	729	1,373	8.39
Saginaw	220,831	228,059	- 7,228	- 3.17	11,767	5,474	- 13,521	- 5.93
St. Clair	138,102	138,802	- 700	- .50	6,644	3,936	- 3,408	- 2.46
St. Joseph	56,751	56,083	668	1.19	2,998	1,623	- 707	- 1.26
Sanilac	39,488	40,789	- 1,301	- 3.19	2,078	1,293	- 2,086	- 5.12
Schoolcraft	8,394	8,575	- 181	- 2.12	400	324	- 257	- 3.00
Shiawassee	68,651	71,140	- 2,490	- 3.50	3,571	1,636	- 4,425	- 6.22
Tuscola	55,092	56,961	- 1,869	- 3.28	2,816	1,447	- 3,238	- 5.68
Van Buren	67,077	66,814	263	.39	3,613	1,964	- 1,387	- 2.08
Washtenaw	269,105	264,748	4,357	1.65	12,607	4,587	- 3,663	- 1.38
Wayne	2,252,102	2,337,891	- 85,789	- 3.67	111,642	73,623	-123,808	- 5.29
Wexford	26,011	25,102	909	3.62	1,380	819	348	1.38

[1]The preliminary estimates are subject to change when more data become available.

[2]The number of births and deaths are derived from the reported vital statistics released by the Michigan Department of Public Health between 1980 and 1983. Three quarters of the 1980 resident births and deaths are used as those occurring between April 1, 1980 and December 31, 1980. One-half of the 1983 estimated resident births and deaths are used as those occurring between January 1, 1983 and June 30, 1983.

[3]Net migration is the difference between net change and natural increase.

Source: Michigan Department of Management and Budget.

Table B-36

U.S. Population, Ranked by State, 1980

Rank	State	1980 Census	Rank	State	1980 Census
	United States	226,504,825			
1	California	23,668,902	26	Oklahoma	3,025,290
2	New York	17,558,072	27	Iowa	2,913,808
3	Texas	14,229,191	28	Colorado	2,889,964
4	Pennsylvania	11,863,895	29	Arizona	2,718,215
5	Illinois	11,426,518	30	Oregon	2,633,105
6	Ohio	10,797,630	31	Mississippi	2,520,638
7	Florida	9,746,324	32	Kansas	2,363,679
8	Michigan	9,262,078	33	Arkansas	2,286,435
9	New Jersey	7,364,823	34	West Virginia	1,949,644
10	North Carolina	5,881,766	35	Nebraska	1,569,825
11	Massachusetts	5,737,037	36	Utah	1,461,037
12	Indiana	5,490,224	37	New Mexico	1,302,894
13	Georgia	5,463,105	38	Maine	1,124,660
14	Virginia	5,346,818	39	Hawaii	964,691
15	Missouri	4,916,686	40	Rhode Island	947,154
16	Wisconsin	4,705,767	41	Idaho	943,935
17	Tennessee	4,591,120	42	New Hampshire	920,610
18	Maryland	4,216,975	43	Nevada	800,493
19	Louisiana	4,205,900	44	Montana	786,690
20	Washington	4,132,156	45	South Dakota	690,768
21	Minnesota	4,075,970	46	North Dakota	652,717
22	Alabama	3,893,888	47	Delaware	594,338
23	Kentucky	3,660,777	48	Vermont	511,456
24	South Carolina	3,121,820	49	Wyoming	469,557
25	Connecticut	3,107,576	50	Alaska	401,851

Source: U.S. Department of Commerce, Bureau of the Census.

Table B-37

Michigan School Enrollment, Grades K-12, 1975-1988[1]

Year		Kinder-garten	Change From Last Period	Grades 1-6	Change From Last Period	Grades 7-9	Change From Last Period	Grades 10-12	Change From Last Period	Grades K-12	Change From Last Period
1974-75	Public	155,987	2,163	914,108	-30,821	512,494	- 3,542	473,860	- 52	2,056,449	-32,252
	Nonpublic	6,871	1,029	109,379	- 5,365	54,662	- 418	38,654	45	209,566	- 4,709
	Total	162,858	3,192	1,023,487	-36,186	567,156	- 3,960	512,514	- 7	2,266,015	-36,961
1975-76	Public	159,981	3,994	884,786	-29,322	506,107	- 6,387	475,334	1,474	2,026,208	-30,241
	Nonpublic	8,825	1,934	107,936	- 1,443	53,181	- 1,481	38,750	96	208,692	- 874
	Total	168,806	5,948	992,722	-30,765	559,288	-7,868	514,084	1,570	2,234,900	-31,115
1976-77	Public	152,790	- 7,191	866,756	-18,030	496,190	- 9,917	473,452	- 1,882	1,989,188	-37,020
	Nonpublic	9,937	1,112	109,287	1,351	52,943	- 238	38,686	- 64	210,853	2,161
	Total	162,727	- 6,079	976,043	-16,679	549,133	-10,155	512,138	- 1,946	2,200,041	-34,859
1977-78	Public	136,843	-15,947	852,650	-14,106	479,150	-17,040	460,862	-12,590	1,929,505	-59,683
	Nonpublic	9,882	- 55	108,107	- 1,180	51,896	- 1,047	38,795	109	208,680	- 2,173
	Total	146,725	-16,002	960,757	-15,286	531,046	-18,087	499,657	-12,481	2,138,185	-61,856
1978-79	Public	129,592	- 7,251	832,229	-20,421	457,555	-21,595	450,435	-10,427	1,869,811	-59,694
	Nonpublic	10,166	284	105,507	- 2,600	49,558	- 2,338	38,249	- 546	203,480	- 5,200
	Total	139,758	- 6,967	937,736	-23,021	507,113	-23,933	488,684	-10,973	2,073,291	-64,894
1979-80	Public	125,196	- 4,396	808,981	-23,248	435,955	-21,500	434,526	-15,909	1,804,658	-65,153
	Nonpublic	11,172	1,006	103,747	- 1,760	48,244	- 1,314	37,966	- 283	201,129	- 2,351
	Total	136,368	- 3,390	912,728	-25,008	484,199	-21,914	472,492	-16,192	2,005,787	-67,504
1980-81	Public	122,425	- 2,771	782,405	-26,576	418,929	-17,026	419,920	-14,606	1,743,679	-609,979
	Nonpublic	11,950	778	104,341	594	47,575	- 669	37,672	- 294	201,538	409
	Total	134,375	- 1,993	886,746	-25,982	466,605	-17,695	457,592	-14,900	1,945,217	-60,570
1981-82	Public	116,753	- 5,672	745,796	-36,609	405,852	-13,077	399,929	-19,991	1,668,330	-75,349
	Nonpublic	13,085	1,135	104,636	295	47,303	- 272	37,121	- 551	202,145	607
	Total	129,838	- 4,537	850,432	-36,314	453,155	-13,349	437,050	-20,542	1,870,475	-74,742

Table B-37 (continued)

Michigan School Enrollment, Grades K-12, 1975-1988[1]

Year	Kinder-garten	Change From Last Period	Grades 1-6	Change From Last Period	Grades 7-9	Change From Last Period	Grades 10-12	Change From Last Period	Grades K-12	Change From Last Period
1982-83 Public	120,826	4,073	704,676	-41,120	402,308	- 3,544	382,154	-17,775	1,609,964	-58,366
Nonpublic	13,807	722	101,206	- 3,430	47,577	274	35,760	- 1,361	198,350	- 3,795
Total	134,633	4,795	805,882	-44,550	449,885	- 3,270	417,914	-19,136	1,808,314	-62,161
1983-84[2] Public	122,256	1,430	677,590	-27,086	403,291	983	364,675	-17,479	1,567,812	-42,152
Nonpublic	14,894	1,087	100,126	- 1,080	47,116	- 461	34,445	- 1,315	196,581	- 1,769
Total	137,150	2,517	777,716	-28,166	450,407	522	399,120	-18,794	1,764,393	-43,921
1984-85[2] Public	127,233	4,977	664,636	-12,954	390,892	-12,399	355,896	- 8,779	1,538,657	-29,155
Nonpublic	15,500	606	101,310	1,184	45,719	- 1,397	33,198	- 1,247	195,727	- 854
Total	142,733	5,583	765,946	-11,770	436,611	-13,796	389,094	-10,026	1,734,384	-30,009
1985-86[2] Public	128,211	978	663,519	- 1,117	366,895	-23,997	355,892	- 4	1,514,517	-24,140
Nonpublic	15,619	119	103,599	2,209	43,446	- 2,273	33,559	361	196,223	496
Total	143,830	1,097	767,118	1,172	410,341	-26,270	389,451	357	1,710,740	-23,644
1986-87[2] Public	123,821	- 4,390	668,405	4,886	341,520	-25,375	356,369	477	1,490,115	-24,402
Nonpublic	15,085	- 534	105,777	2,178	42,638	- 808	33,115	- 444	196,615	392
Total	138,906	- 4,924	774,182	7,064	384,158	-26,183	389,484	33	1,686,730	-24,010
1987-88[2] Public	121,506	- 2,315	671,616	3,211	326,038	-15,482	343,672	-12,697	1,462,832	-27,283
Nonpublic	14,802	- 283	107,416	1,639	42,543	- 95	32,256	- 859	197,027	412
Total	136,308	- 2,598	779,032	4,850	368,581	-15,577	375,928	-13,556	1,659,859	-26,871

[1]Excludes special education and part-time students.

[2]Projected enrollments are derived from Stanley E. Hecker and Frederick R. Ignatovich, Michigan Total, Public, and Nonpublic Membership Projections, Michigan State University, Department of Administration and Higher Education, October 17, 1983.

Source: Michigan Department of Education and Michigan State University, Department of Administration and Curriculum.

Table B-38

Michigan Elementary, Secondary, and Higher Education Student Enrollments, 1973-1983

School Year	Elementary[1]		Secondary[2]		Total K-12			Percent Change		
	Public	Private	Public	Private	Public	Private	Public and Private	Public	Private	Public and Private
1972-73	1,168,731	126,431	1,024,539	94,811	2,193,270	221,242	2,414,512			
1973-74	1,132,474	121,584	1,025,401	93,718	2,157,875	215,302	2,373,177	- 0.9	- 1.2	- 0.9
1974-75	1,103,770	117,023	1,033,493	93,324	2,137,263	210,347	2,347,610	- 1.6	- 2.7	- 1.7
1975-76	1,082,797	117,713	1,045,120	91,805	2,127,917	209,518	2,337,435	- 1.0	- 2.3	- 1.1
1976-77	1,055,682	160,445	1,062,390	54,653	2,118,072	215,098	2,333,170	- 0.4	- 0.4	- 0.4
1977-78	1,028,963	117,989	1,035,673	93,951	2,064,636	211,940	2,273,576	- 0.5	2.7	- 1.7
1978-79	1,003,355	116,213	962,802	87,846	1,966,157	204,059	2,170,216	- 2.5	- 1.5	- 2.4
1979-80	979,492	122,539	931,842	86,261	1,911,334	208,800	2,120,134	- 4.8	- 3.7	- 4.5
1980-81	953,039	116,291	838,849	85,247	1,791,888	201,538	1,993,426	- 2.8	2.3	- 2.3
1981-82	911,119	117,721	805,781	84,424	1,716,900	202,145	1,919,045	- 6.2	- 3.5	- 6.0
1982-83	875,266	115,013	784,462	83,337	1,659,728	198,350	1,858,078	- 4.1	- 3.8	- 3.7
								- 3.3	- 1.9	- 3.2

School Year	Public Higher Education				Private Higher Education		Total Higher Education	Percent Change
	Two-Year	Four-Year	Total	Percent Change	Total	Percent Change		
1972-73	136,611	218,724	355,335		50,593		405,928	
1973-74	152,715	221,893	374,608	0.9	51,160	- 4.4	425,768	0.2
1974-75	173,643	229,627	403,270	5.4	55,273	1.1	458,543	4.9
1975-76	197,199	240,442	437,641	7.7	61,081	8.0	498,722	7.7
1976-77	187,622	236,831	424,453	8.5	60,372	10.5	484,825	8.8
1977-78	186,876	236,618	423,494	- 3.0	61,906	- 1.2	485,400	- 2.8
1978-79	187,649	236,035	423,684	- 0.2	62,810	2.5	486,494	0.1
1979-80	231,915	240,600	450,154	0.1	64,333	1.5	514,487	0.2
1980-81	244,971	242,999	487,970	6.3	66,216	2.4	554,186	5.8
1981-82	211,871	235,027	446,897	8.4	68,406	2.9	515,303	7.7
1982-83	213,204	226,385	439,589	- 8.4	69,807	3.3	509,396	- 7.0
1983-84	217,230	226,999	444,229	- 1.6	73,089	2.0	517,318	- 1.1
				1.1		4.7		1.6

[1]Includes grades K-6 and special education students.

[2]Includes grades 7-12 and part-time students.

Source: Michigan Department of Education and Michigan Department of Management and Budget.

Table B-39

Michigan Real and Personal Property Values, Taxes and Tax Rates, 1953-1983
(Thousands)

Year	Assessed Valuation	County Equalized Valuation	State Equalized Valuation	Tax Levy Amount	Tax Levy Percent[1] Change	Average Tax Levy Amount	Average Tax Levy Percent[1] Change
1953	$12,094,392	$13,059,429	$15,720,900	$ 443,292	8.3	28.20	- 6.1
1954	12,782,605	13,910,137	16,722,075	496,501	12.2	29.69	5.3
1955	13,481,826	15,505,027	17,551,275	563,871	13.5	32.13	8.2
1956	14,530,579	17,044,209	18,957,624	621,839	10.3	32.80	2.1
1957	15,452,973	18,511,832	21,602,319	710,464	14.1	32.89	0.3
1958	15,926,183	19,501,399	22,153,627	741,260	4.4	33.46	1.7
1959	16,126,254	19,883,366	22,438,384	786,649	6.2	35.06	4.8
1960	16,629,847	20,811,250	24,870,342	851,180	8.1	34.22	- 2.4
1961	16,784,842	22,422,661	25,202,552	874,775	2.8	34.71	1.4
1962	16,984,435	22,802,732	25,182,559	891,307	1.8	35.39	2.0
1963	17,190,129	23,211,055	25,797,485	934,869	4.9	36.24	2.4
1964	17,694,863	24,053,734	26,350,184	991,234	6.0	37.62	3.8
1965	18,370,770	24,745,771	27,080,518	1,038,623	4.8	38.35	1.9
1966	20,483,070	27,905,044	28,206,349	1,129,224	8.7	40.03	4.4
1967	24,260,128	29,807,504	29,891,295	1,288,682	14.1	43.11	7.7
1968	27,702,241	32,012,879	32,041,173	1,474,994	14.5	46.03	6.8
1969	30,079,712	35,083,860	35,101,273	1,660,861	12.6	47.32	2.8
1970	32,954.101	38,553,759	38,551,597	1,874,291	12.9	48.62	2.7
1971	36,593,349	41,562,933	41,648,959	2,063,280	10.1	49.54	1.9
1972	39,814,568	44,347,772	44,487,728	2,183,224	5.8	49.07	- 0.9
1973	42,648,458	47,492,752	47,612,674	2,420,403	10.9	50.84	3.6
1974	47,269,245	51,747,552	51,871,329	2,649,594	9.5	51.08	0.5
1975	51,148,731	55,802,269	56,800,875	2,903,906	9.6	51.12	0.1
1976	49,905,386	54,232,820	55,478,935	2,960,724	2.0	53.37	4.4
1977	53,867,947	59,305,512	59,512,999	3,207,096	8.3	53.89	0.9
1978	58,353,692	64,724,020	64,863,929	3,484,874	8.7	53.73	- 0.3
1979	64,169,123	72,449,469	72,527,956	3,890,996	11.7	53.64	- 0.2
1980	71,724,587	82,087,269	82,646,050	4,414,952	13.5	53.42	- 0.4
1981	80,256,048	91,930,689	92,059,135	4,909,514	11.2	53.34	- 0.2
1982	95,623,614	96,742,630	98,210,884	5,172,518	5.4	52.71	- 1.1
1983[2]	97,966,707	98,326,260	98,302,925	5,187,279	0.3	52.77	0.1

[1]From previous year.

[2]Assessed valuation and county equalized valuation do not reflect the effect of appeals.

Source: Michigan Department of Treasury, State Tax Commission.

Table B-40

Michigan Real and Personal Property Values by Class, 1969-1983

Year[1]	Real					
	Agriculture	Commercial	Industrial	Residential	Timber Cut-Over	Total
1969	$2,259,750,633	$3,895,805,295	$4,026,509,087	$16,769,575,874	$ 42,832,730	$27,094,473,619
1970	2,430,122,929	4,482,891,393	4,357,805,773	18,425,815,010	152,210,761	29,848,845,866
1971	2,631,643,039	4,920,726,264	4,732,051,343	20,121,981,797	166,389,114	32,572,791,557
1972	2,767,998,546	5,289,180,485	5,036,268,660	21,837,363,296	198,391,053	35,099,202,040
1973	2,966,596,460	6,095,838,694	5,257,318,114	23,132,331,200	230,441,780	37,682,526,248
1974	3,253,519,145	6,748,511,652	5,614,001,496	25,185,954,680	259,918,052	41,061,905,025
1975	3,680,674,772	7,251,964,454	5,824,753,617	27,679,961,125	289,724,453	44,727,078,421
1976	3,931,334,132	7,643,557,366	6,356,640,800	29,652,286,598	339,314,392	47,923,133,288
1977	4,410,266,132	8,077,760,508	6,585,112,846	32,150,563,868	381,970,088	51,605,673,442
1978	5,050,142,536	8,650,737,622	6,935,567,107	35,256,657,107	422,603,165	56,315,708,253
1979	5,766,430,668	9,581,045,520	7,502,276,607	39,954,252,345	466,549,835	63,270,554,975
1980	6,328,135,948	10,633,386,181	8,181,599,425	46,669,303,911	687,806,033	72,500,231,498
1981	6,851,013,534	11,556,372,899	9,124,359,043	53,018,207,770	529,173,435	81,492,349,275[2]
1982	7,378,223,333	12,186,372,328	9,418,002,354	57,491,186,325	514,930,615	87,187,419,816[2]
1983	7,429,329,879	12,465,415,642	9,452,673,269	56,977,602,048	499,165,062	87,040,838,141

Year	Personal					
	Agriculture	Commercial	Industrial	Residential	Utility	Total
1969	134,764	1,786,309,802	4,670,662,761	37,587,110	1,612,062,552	8,106,756,989
1970	74,842	1,962,491,600	5,009,824,294	26,318,343	1,758,839,874	8,757,548,953
1971	94,686	2,060,693,881	5,128,931,506	27,807,650	1,847,296,876	9,064,824,599
1972	80,064	2,134,366,046	5,227,795,300	28,592,264	1,979,750,787	9,370,584,461
1973	128,156	2,328,516,373	5,417,026,545	32,384,384	2,143,642,638	9,921,698,096
1974	207,163	2,591,166,371	5,812,222,781	36,173,370	2,379,939,037	10,819,708,722
1975	204,494	2,844,516,638	6,551,055,713	39,285,910	2,652,494,463	12,087,557,218
1976	199,605	1,524,568,091	3,568,938,839	42,203,838	2,402,751,114	7,538,661,487
1977	261,790	1,621,573,625	3,702,836,647	44,002,603	2,528,988,905	7,897,663,570
1978	255,864	1,781,876,984	4,029,145,367	52,710,272	2,690,893,405	8,554,881,892
1979	279,328	1,971,939,226	4,304,285,432	54,087,484	2,926,809,276	9,257,400,746
1980	258,028	2,213,845,812	4,667,437,859	63,271,040	3,201,005,728	10,145,818,467
1981	490,114	2,458,616,916	4,753,688,798	61,383,795	3,292,605,897	10,566,785,520
1982	294,784	2,662,733,997	4,829,682,933	61,639,336	3,468,291,966	11,022,643,016
1983	655,831	2,814,352,083	4,754,502,733	59,061,371	3,674,349,279	11,302,921,297

[1]Figures through 1970 represent 50 percent of true cash value—figures after 1971 represent state equalized value.

[2]The total for real property includes small amounts of developmental property.

Source: Michigan Department of Treasury, State Tax Commission.

Table B-41

Michigan General Property Taxes by Local Unit of Government, 1960-1982
(Dollar Amounts in Thousands)

Year	School		City		County		Township		Village		Total	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
1960	$ 434,146.0	51.0	$250,634.4	29.4	$146,079.6	17.2	$ 12,840.1	1.5	$ 7,479.5	0.9	$ 851,179.6	100.0
1961	451,447.4	51.6	253,717.6	29.0	148,592.5	17.0	13,910.8	1.6	7,107.0	0.8	874,775.3	100.0
1962	465,724.7	52.3	254,522.7	28.6	149,178.6	16.7	14,697.9	1.6	7,183.0	0.8	891,306.9	100.0
1963	498,052.4	53.3	260,411.0	27.8	153,274.8	16.4	15,773.4	1.7	7,357.4	0.8	934,869.0	100.0
1964	534,370.4	53.9	265,713.7	26.8	166,548.3	16.8	16,978.0	1.7	7,623.8	0.8	991,234.2	100.0
1965	571,091.1	55.0	269,558.3	26.0	172,293.6	16.6	19,024.5	1.8	6,655.5	0.6	1,038,623.0	100.0
1966	636,209.7	56.3	282,974.0	25.1	181,355.7	16.1	21,743.5	1.9	6,941.4	0.6	1,129,224.3	100.0
1967	750,348.5	58.2	314,664.2	24.4	189,037.4	14.7	26,793.6	2.1	7,838.3	0.6	1,288,682.0	100.0
1968	898,866.9	60.9	339,445.3	23.0	199,504.7	13.5	28,703.2	2.0	8.474.1	0.6	1,474,994.2	100.0
1969	1,032,700.1	62.2	368,264.1	22.2	216,840.8	13.1	33,868.7	2.0	9,187.6	0.5	1,660,861.3	100.0
1970	1,167,313.3	62.3	417,562.7	22.3	240,246.9	12.8	38,954.4	2.1	10,214.2	0.5	1,874,291.5	100.0
1971	1,293,298.2	62.7	455,499.5	22.1	259,503.5	12.6	43,820.7	2.1	11,158.2	0.5	2,063,280.1	100.0
1972	1,367,523.3	62.6	478,665.4	21.9	276,349.4	12.7	47,966.9	2.2	12,719.4	0.6	2,183,224.4	100.0
1973	1,543,161.8	63.8	515,281.2	21.3	294,461.2	12.1	53,656.6	2.2	13,841.8	0.6	2,420,402.6	100.0
1974	1,725,399.0	65.1	525,884.2	19.8	319,716.8	12.1	62,529.7	2.4	16,064.2	0.6	2,649,593.8	100.0
1975	1,899,787.4	65.4	564,565.6	19.4	347,099.5	12.0	74,693.5	2.6	17,759.6	0.6	2,903,905.6	100.0
1976	1,951,535.5	65.9	571,117.9	19.3	341,809.9	11.5	78,555.2	2.7	17,705.1	0.6	2,960,723.6	100.0
1977	2,141,067.6	66.8	586,803.2	18.3	369,748.3	11.5	90,448.4	2.8	19,028.3	0.6	3,207,095.8	100.0
1978	2,342,118.9	67.2	620,979.0	17.8	400,217.0	11.5	100,893.4	2.9	20,665.5	0.6	3,484,873.8	100.0
1979	2,622,639.0	67.4	677,378.3	17.4	447,480.4	11.5	118,691.2	3.1	23,189.3	0.6	3,889,378.1	100.0
1980	3,009,469.3	68.2	736,984.7	16.7	504,459.5	11.5	134,301.8	3.0	26,162.5	0.6	4,411,377.8	100.0
1981	3,372,394.3	68.8	786,309.9	16.0	554,531.7	11.3	156,528.4	3.2	28,622.1	0.6	4,898,386.4	100.0
1982	3,588,710.1	69.4	811,269.2	15.7	581,142.1	11.2	161,778.6	3.1	29,618.3	0.6	5,172,518.3	100.0

Source: Michigan Department of Treasury, State Tax Commission.

Table B-42

Michigan School Property Taxes, 1960-1982
(Dollar Amounts in Thousands)

Year	Operating			Debt and Building and Site			Total School Taxes		
	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total Property Taxes	Millage Rate
1960	$ 322,184.3	74.2	12.96	$111,961.7	25.8	4.50	$ 434,146.0	37.9	17.46
1961	342,556.0	75.9	13.59	108,891.4	24.1	4.32	451,447.4	39.2	17.91
1962	363,570.0	78.1	14.44	102,154.7	21.9	4.05	465,724.7	40.8	18.49
1963	398,223.4	80.0	15.44	99,829.0	20.0	3.87	498,052.4	42.6	19.31
1964	433,945.3	81.2	16.47	100,425.1	18.8	3.81	534,370.4	43.8	20.28
1965	466,697.7	81.7	17.23	104,393.4	18.3	3.86	571,091.1	44.9	21.09
1966	524,235.6	82.4	18.59	111,974.1	17.6	3.97	636,209.7	46.4	22.56
1967	629,330.8	83.9	21.05	121,017.7	16.1	4.05	750,348.5	48.8	25.10
1968	761,094.8	84.7	23.75	137,772.1	15.3	4.30	898,866.9	51.6	28.05
1969	868,152.4	84.1	24.73	164,547.7	15.9	4.69	1,032,700.1	52.2	29.42
1970	989,877.6	84.8	25.68	177,435.7	15.2	4.60	1,167,313.3	52.8	30.28
1971	1,101,358.7	85.2	26.44	191,939.5	14.8	4.61	1,293,298.2	53.3	31.05
1972	1,171,356.3	85.7	26.33	196,167.0	14.3	4.41	1,367,523.3	53.6	30.74
1973	1,317,419.4	85.4	27.67	225,742.4	14.6	4.74	1,543,161.8	54.4	32.41
1974	1,494,394.3	86.6	28.81	231,004.6	13.4	4.45	1,725,399.0	56.4	33.26
1975	1,663,951.6	87.6	29.30	235,835.8	12.4	4.15	1,899,787.4	57.3	33.45
1976	1,702,285.7	87.2	30.69	249,249.8	12.8	4.49	1,951,535.5	57.5	35.18
1977	1,891,472.6	88.3	31.78	249,595.0	11.7	4.20	2,141,067.6	66.8	35.98
1978	2,072,999.5	88.5	31.96	269,119.4	11.5	4.15	2,342,118.9	67.2	36.11
1979	2,339,301.7	89.2	32.25	283,337.3	10.8	3.90	2,622,639.0	67.4	36.15
1980	2,710,253.0	90.1	32.82	299,216.4	9.9	3.62	3,009,469.3	68.2	36.44
1981	3,077,112.0	91.2	33.52	295,282.4	8.8	3.22	3,372,394.3	68.8	36.74
1982	3,293,603.8	91.8	33.56	295,106.3	8.2	3.01	3,588,710.1	69.4	36.57

Source: Michigan Department of Treasury, State Tax Commission..

Table B-43

U.S. and Michigan Personal and Per Capita Income, 1960-1983

Year	Michigan Personal Income (Millions)	Percent Change	U.S. Personal Income (Millions)	Percent Change	Michigan Per Capita Income	Percent Change	U.S. Per Capita Income	Percent Change	Michigan Per Capita Income as Percent of U.S. Per Capita Income
1960	$ 18,328	4.0	$ 398,843	4.3	$ 2,339	3.1	$ 2,216	2.6	105.6
1961	18,281	- 0.3	414,285	3.9	2,316	- 1.0	2,264	2.2	102.3
1962	19,560	7.0	440,023	6.2	2,466	6.5	2,369	4.6	104.1
1963	20,887	6.8	462,406	5.1	2,592	5.1	2,454	3.6	105.6
1964	22,904	9.7	495,188	7.1	2,798	7.9	2,592	5.6	107.9
1965	25,511	11.4	536,152	8.3	3,053	9.1	2,772	6.9	110.1
1966	27,844	9.1	582,630	8.7	3,271	7.1	2,980	7.5	109.8
1967	28,967	4.0	623,757	7.1	3,357	2.6	3,161	6.1	106.2
1968	32,010	10.5	683,561	9.6	3,681	9.7	3,430	8.5	107.3
1969	34,862	8.9	747,536	9.4	3,970	7.9	3,714	8.3	106.9
1970	35,976	3.2	803,922	7.5	4,044	1.9	3,945	6.2	102.5
1971	39,068	8.6	861,904	7.2	4,355	7.7	4,167	5.6	104.5
1972	43,282	10.8	944,852	9.6	4,796	10.1	4,515	8.4	106.2
1973	48,382	11.8	1,058,902	12.1	5,333	11.2	5,010	11.0	106.4
1974	51,740	6.9	1,162,203	9.8	5,680	6.5	5,448	8.7	104.3
1975	54,540	5.4	1,258,643	8.3	5,988	5.4	5,842	7.2	102.5
1976	61,324	12.4	1,385,201	10.1	6,726	12.3	6,367	9.0	105.6
1977	69,291	13.0	1,534,708	10.8	7,567	12.5	6,984	9.7	108.3
1978	77,777	12.2	1,726,732	12.5	8,452	11.7	7,775	11.3	108.7
1979	85,983	10.6	1,943,983	12.6	9,297	10.0	8,657	11.3	107.4
1980	91,360	6.3	2,158,685	11.0	9,872	6.2	9,503	9.8	103.9
1981	97,870	7.1	2,426,901	12.4	10,620	7.6	10,582	11.4	100.4
1982	99,920[1]	2.1	2,571,592	6.0	10,829[1]	2.0	11,107	5.0	97.5
1983[1]	106,384	6.5	2,733,602	6.3	11,620	7.3	11,696	5.3	99.4

[1]Estimated by the Michigan Department of Management and Budget.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table B-44

U.S. and Michigan Real Personal and Per Capita Income, 1965-1983[1]
(1967 Dollars)

Year	Real Michigan Personal Income (Millions)	Percent Change	Real U.S. Personal Income (Millions)	Percent Change	Real Michigan Per Capita Income	Percent Change	Real U.S. Per Capita Income	Percent Change	Real Michigan Per Capita Income as Percent of U.S. Real Per Capita Income
1965	$27,550	8.9	$567,357	6.4	$3,297	6.6	$2,933	5.1	112.4
1966	28,794	4.5	599,414	5.7	3,383	2.6	3,066	4.5	110.3
1967	28,967	0.6	623,757	4.1	3,357	- 0.8	3,161	3.1	106.2
1968	30,690	5.9	656,009	5.2	3,529	5.1	3,292	4.1	107.2
1969	31,521	2.7	680,816	3.8	3,590	1.7	3,383	2.8	106.1
1970	30,644	- 2.8	691,248	1.5	3,445	- 4.0	3,392	- 0.3	101.6
1971	32,102	4.8	710,556	2.8	3,578	3.9	3,435	1.3	104.2
1972	34,296	6.8	754,072	6.1	3,800	6.2	3,603	4.9	105.5
1973	35,972	4.9	795,569	5.5	3,965	4.3	3,764	4.5	105.3
1974	34,702	- 3.5	786,867	- 1.1	3,810	- 3.9	3,689	- 2.0	103.3
1975	34,024	- 2.0	780,796	- 0.8	3,735	- 2.0	3,624	- 1.8	103.1
1976	36,308	6.7	812,435	4.1	3,982	6.6	3,734	3.0	106.6
1977	36,410	5.8	845,569	4.1	4,195	5.3	3,848	3.1	109.0
1978	40,071	4.3	883,691	4.5	4,354	3.8	3,979	3.4	109.4
1979	39,298	- 1.9	894,196	1.2	4,249	- 2.4	3,982	0.1	106.7
1980	36,039	- 8.3	874,670	- 2.2	3,894	- 8.4	3,850	- 3.3	101.1
1981	35,319	- 2.0	890,933	1.9	3,833	- 1.6	3,885	0.9	98.7
1982	34,658[2]	- 1.9	889,516	- 0.2	3,756[2]	- 2.0	3,842	- 1.1	97.8
1983[2]	35,880	3.5	916,086	3.0	3,919	4.3	3,920	2.0	100.0

[1]Michigan personal income deflated by Detroit CPI; U.S. personal income deflated by U.S. CPI.

[2]Estimated by Michigan Department of Management and Budget.

Source: U.S. Department of Commerce, Bureau of Economic Analysis and U.S. Department of Labor, Bureau of Labor Statistics. Compiled by Michigan Department of Management and Budget.